



FM/AM DIGITAL SYNTHESIZER TUNER

F-550RDS

HE,HB,HEWZI

- Refer to the service manual ARP2242, F-676/HEWZ type.
- This manual is applicable to the F-550RDS/HE, HB and HEWZI types.

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2. SCHEMATIC AND P.C.BOARDS CONNECTION DIAGRAM	3
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1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:

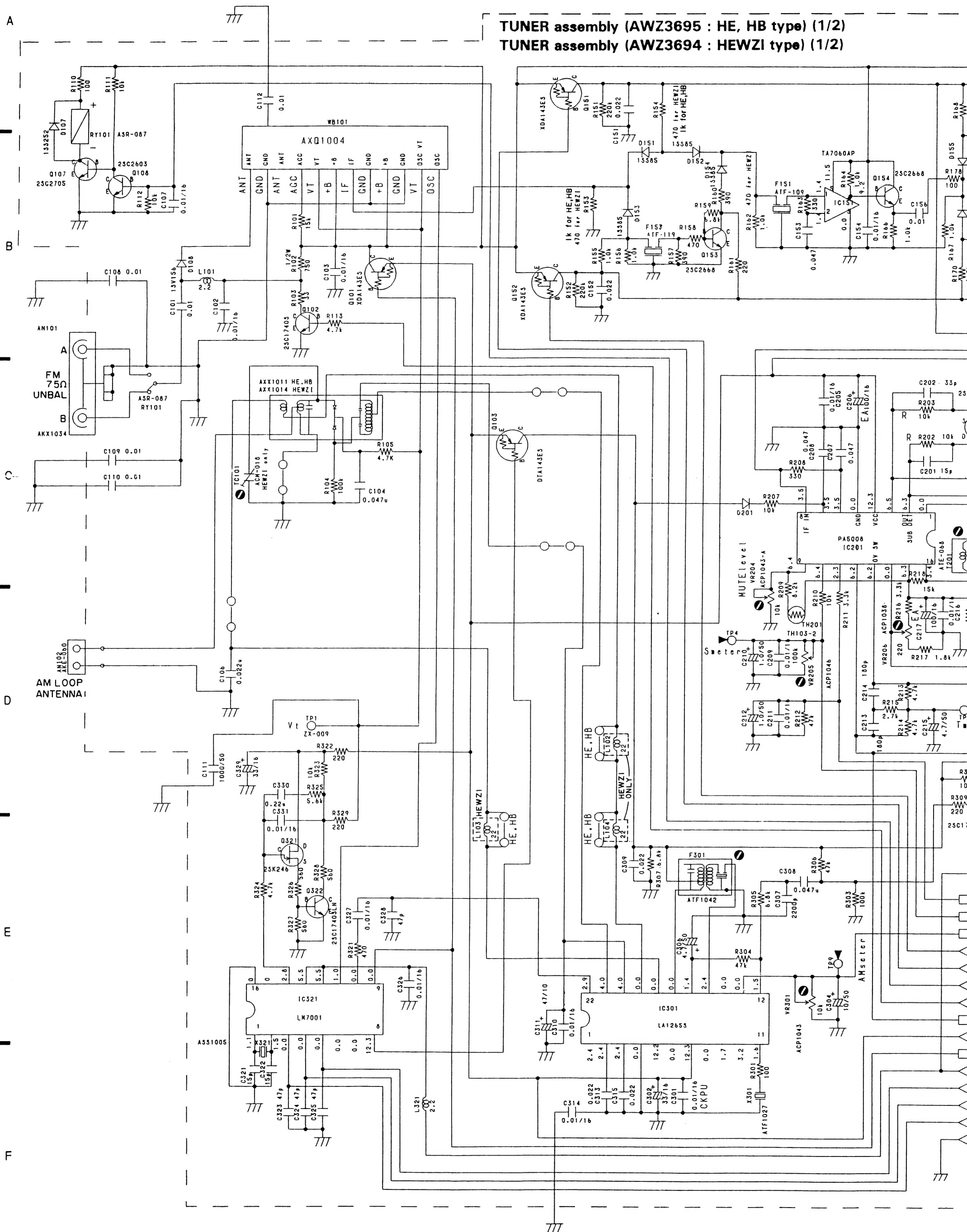
- Part without part number cannot be supplied.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The F – 550RDS/HE, HB and HEWZI types are the same as the F – 676/HEWZ type with the exception of the following sections.

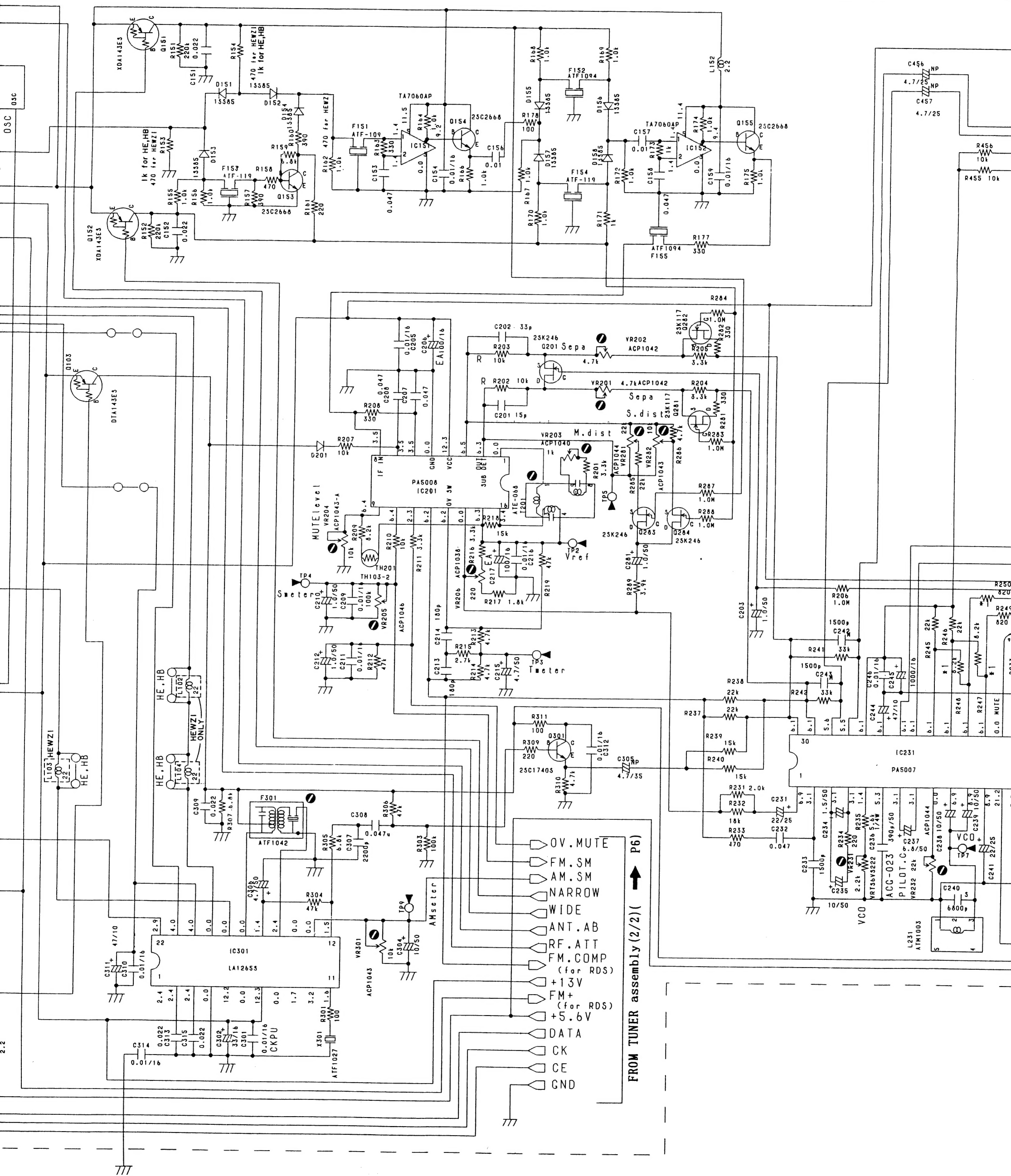
Mark	Symbol & Description	Part No.				Remarks
		F – 676/ HEWZ type	F – 550RDS/ HE type	F – 550RDS/ HB type	F – 550RDS/ HEWZI type	
●	TUNER assembly	AWZ3635	AWZ3695	AWZ3695	AWZ3694	
●	POWER assembly	AWZ3639	AWZ3697	AWZ3697	AWZ3696	
	DISPLAY assembly	AWP1034	AWP1038	AWP1038	AWP1038	
\triangle	AC Power cord	ADG1010	ADG1021	ADG1085	ADG1021	
	Front panel	ANB1449	ANB1481	ANB1481	ANB1481	
	Panel base	AMB1815	AMB1841	AMB1841	AMB1841	
	Screw (EARTH)	ABA1047	.....	.....	ABA1047	
	Packing case	AHD2053	AHD2106	AHD2106	AHD2106	
	Operating instructions (German, Italian)	ARC1263	.....	.....	ARC1283	
	Operating instructions (English, French, German, Italian, Dutch, Swedish, Spanish, Portugues)	.....	ARE1205	.....	.....
	Operating instructions (English)	.....	.....	ARB1326	.....
	Connection cord with mini plug	.....	ADE – 085	ADE – 085	ADE – 085	

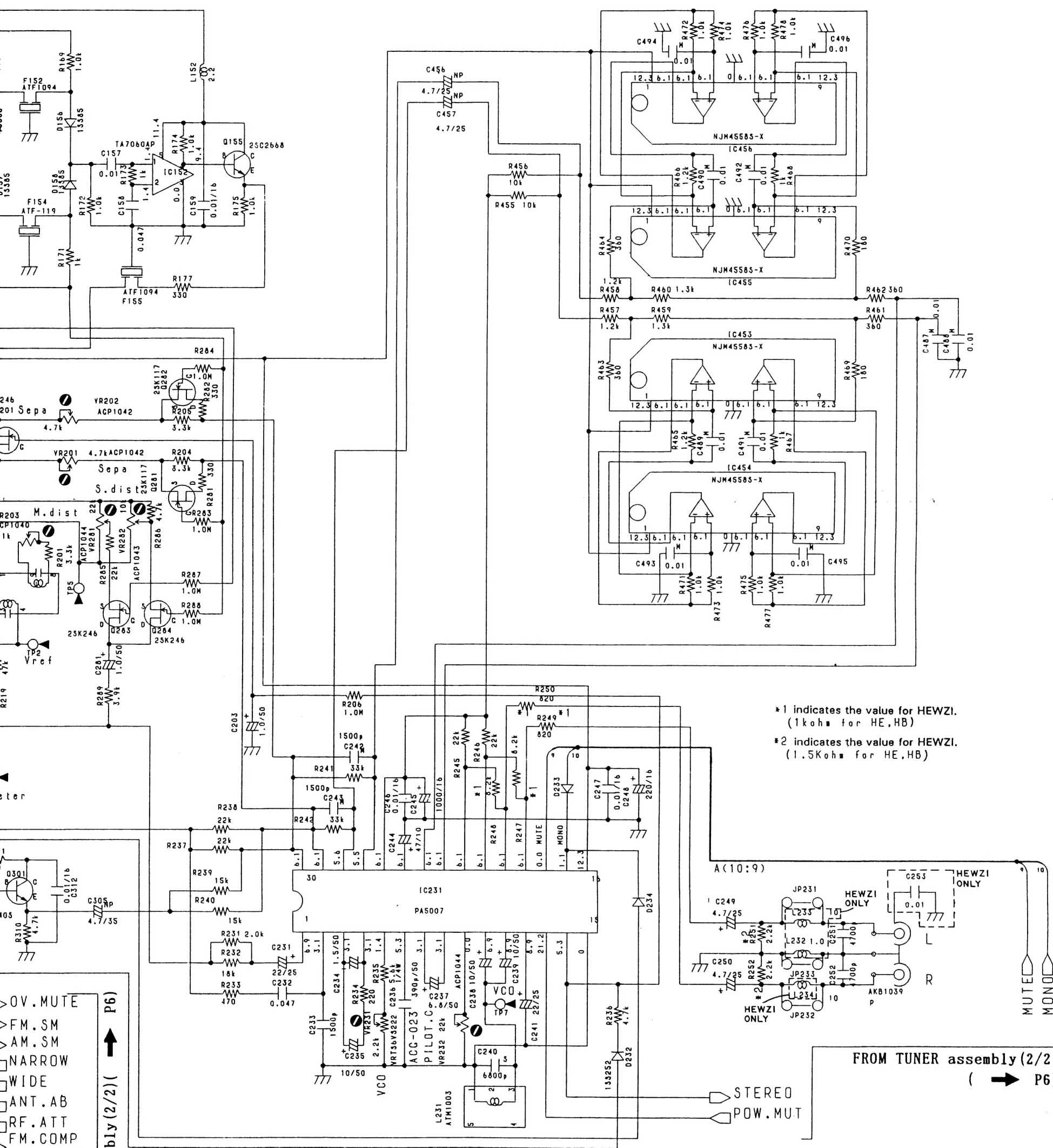
2. SCHEMATIC AND P.C.BOARDS CONNECTION DIAGRAM

2.1 SCHEMATIC DIAGRAM OF TUNER ASSEMBLY (1/2)




TUNER assembly (AWZ3695 : HE, HB type) (1/2)
TUNER assembly (AWZ3694 : HEWZI type) (1/2)





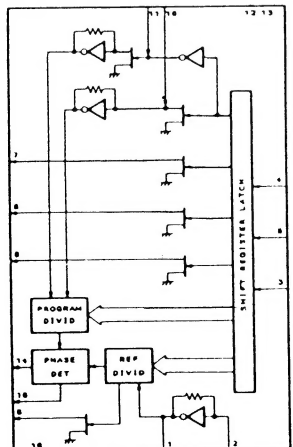
☐ OV. MUTE
☐ FM. SM
☐ AM. SM
☐ NARROW
☐ WIDE
☐ ANT. AB
☐ RF. ATT
☐ FM. COMP
 (for RDS)
☐ +13V
☐ FM+
 (for RDS)
☐ +5.6V
☐ DATA
☐ CK
☐ CE
☐ GND

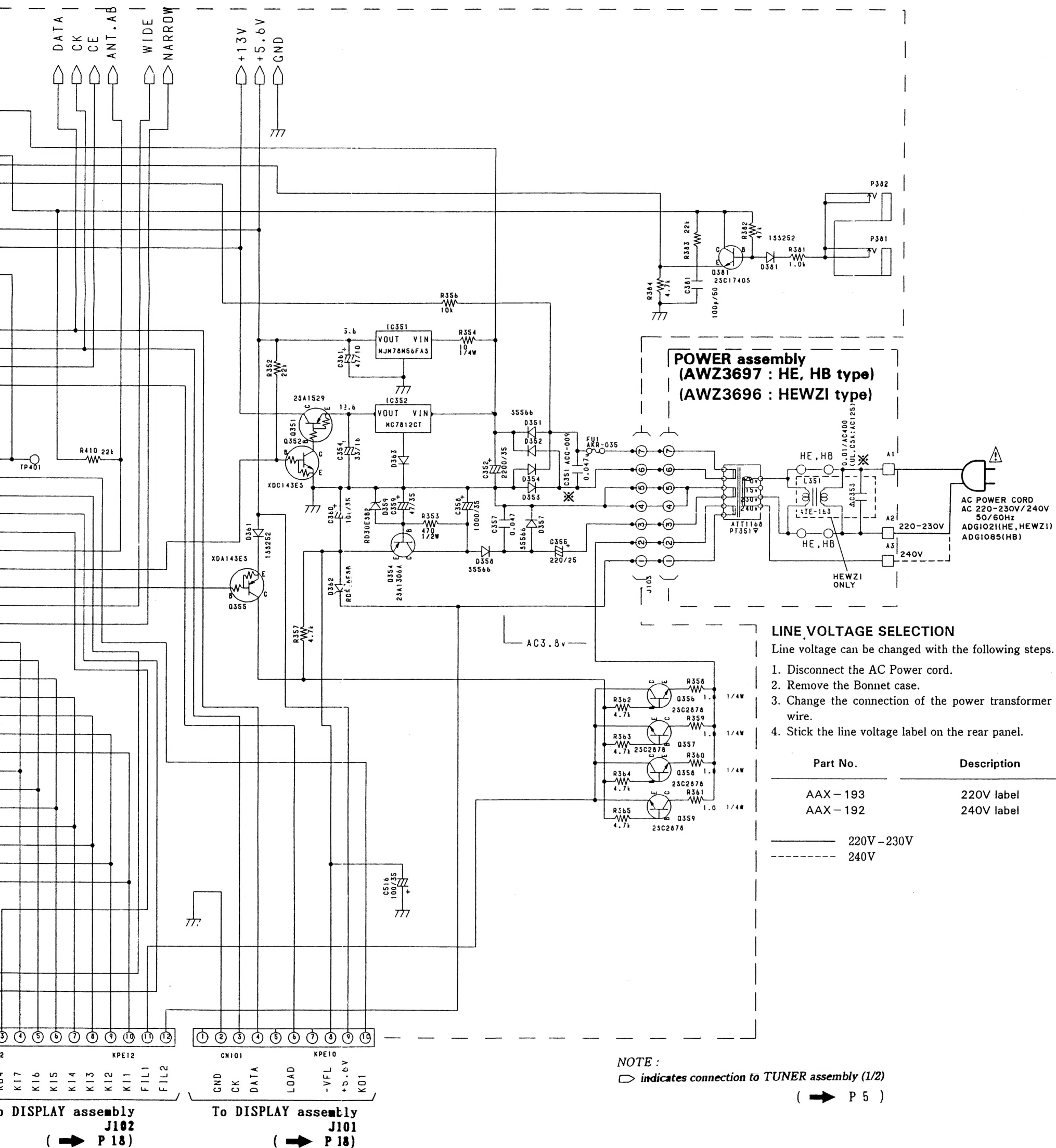
FROM TUNER assembly (2/2) ( P6)

FROM TUNER assembly (2/2)
(➡ P6)

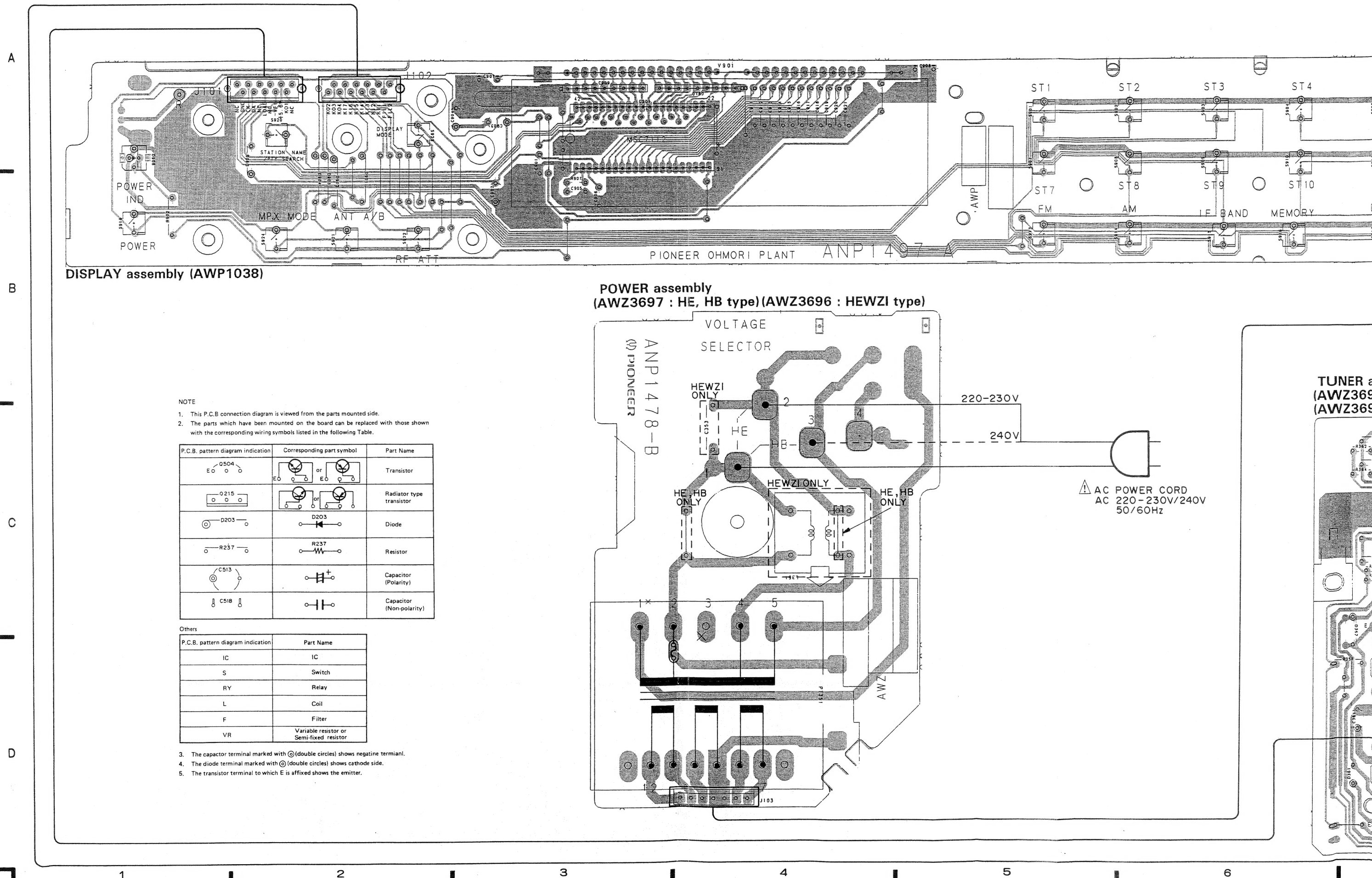
STEREO
POW. MUT.

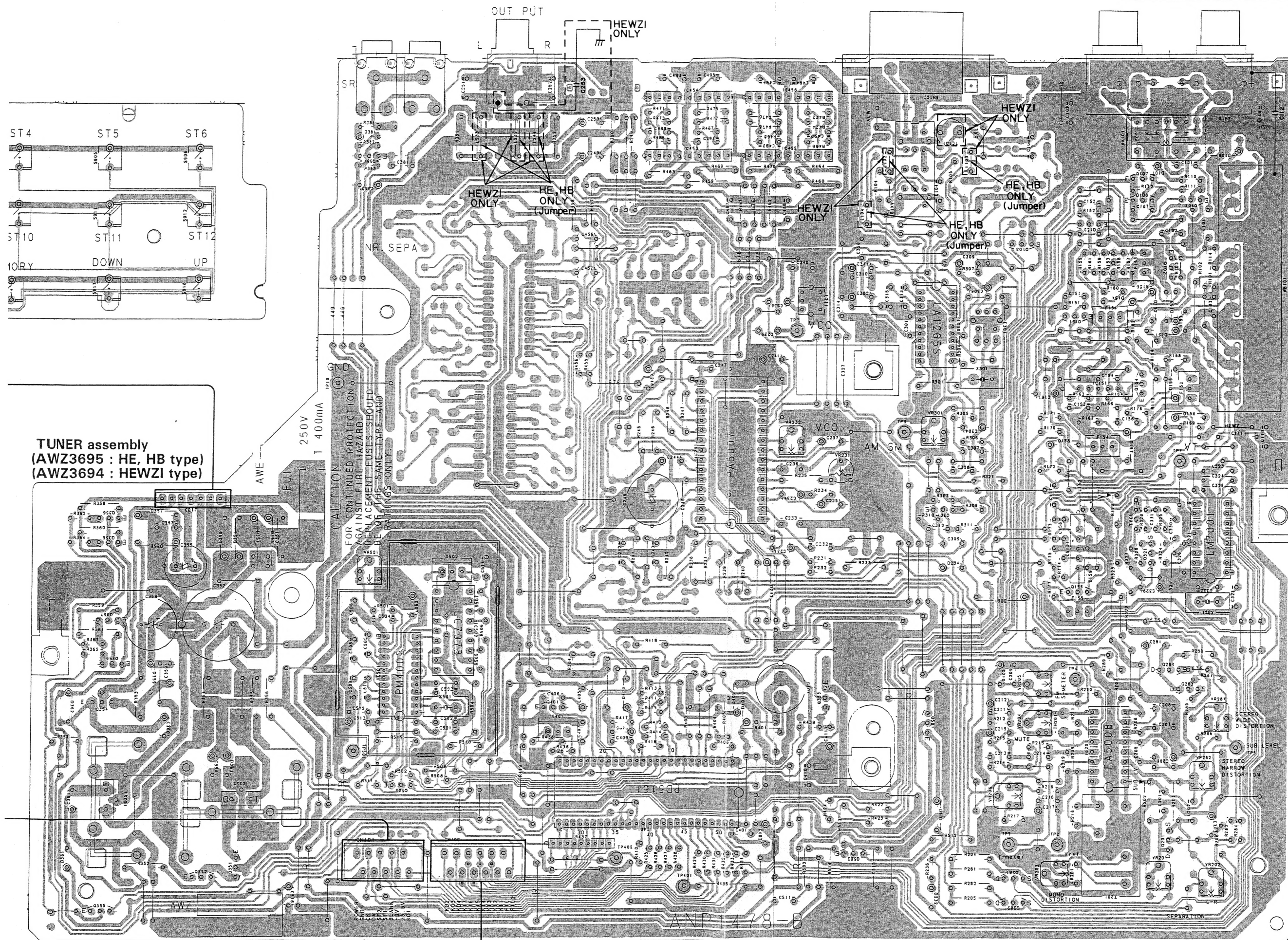
IC321 (LM7001)





2.3 PCB CONNECTION DIAGRAMS





TUNER assembly
(AWZ3695 : HE, HB type)
(AWZ3694 : HEWZI type)

FOR CONTINUED PROTECTION,
AGAINST FIRE HAZARD,
REPLACEMENT FUSES SHOULD
BE OF THE SAME TYPE AND

IC454
IC456

Q381 IC453
IC455

9107

Q108

Q103

Q153
Q102

IC301

VR301
VR232

VR23I

IC231

1

Q356

1

Q155

Q357

VR205

Q359
LC801

16301

VR281

1

VR04

1

VR282

1

4500

Q503

1000

1

1

VR201
VR202

Q352

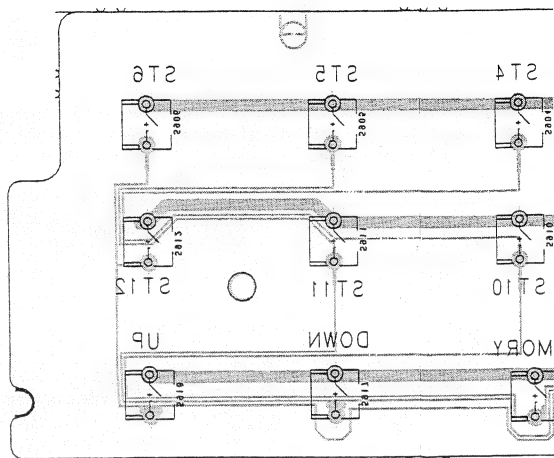
1

A

Р

9

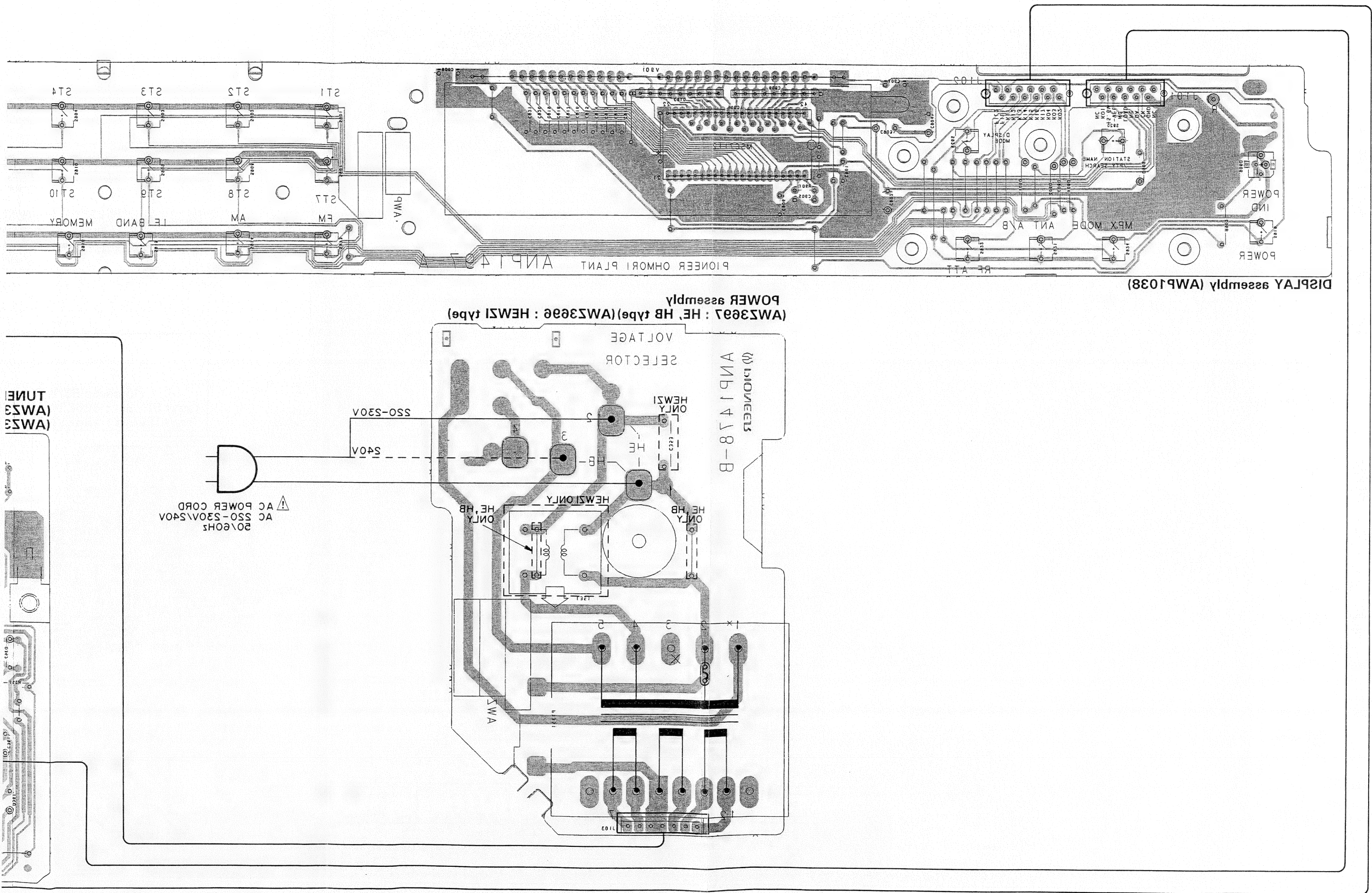
D



CAUTION
FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD,
REPLACEMENT FUSES SHOULD
BE THE SAME TYPE AND
RATING AS ORIGINALS.

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This P.C.B. connection diagram is viewed from the foil side.



2.4 SCHEMATIC DIAGRAM OF DISPLAY ASSEMBLY (AWP1038)

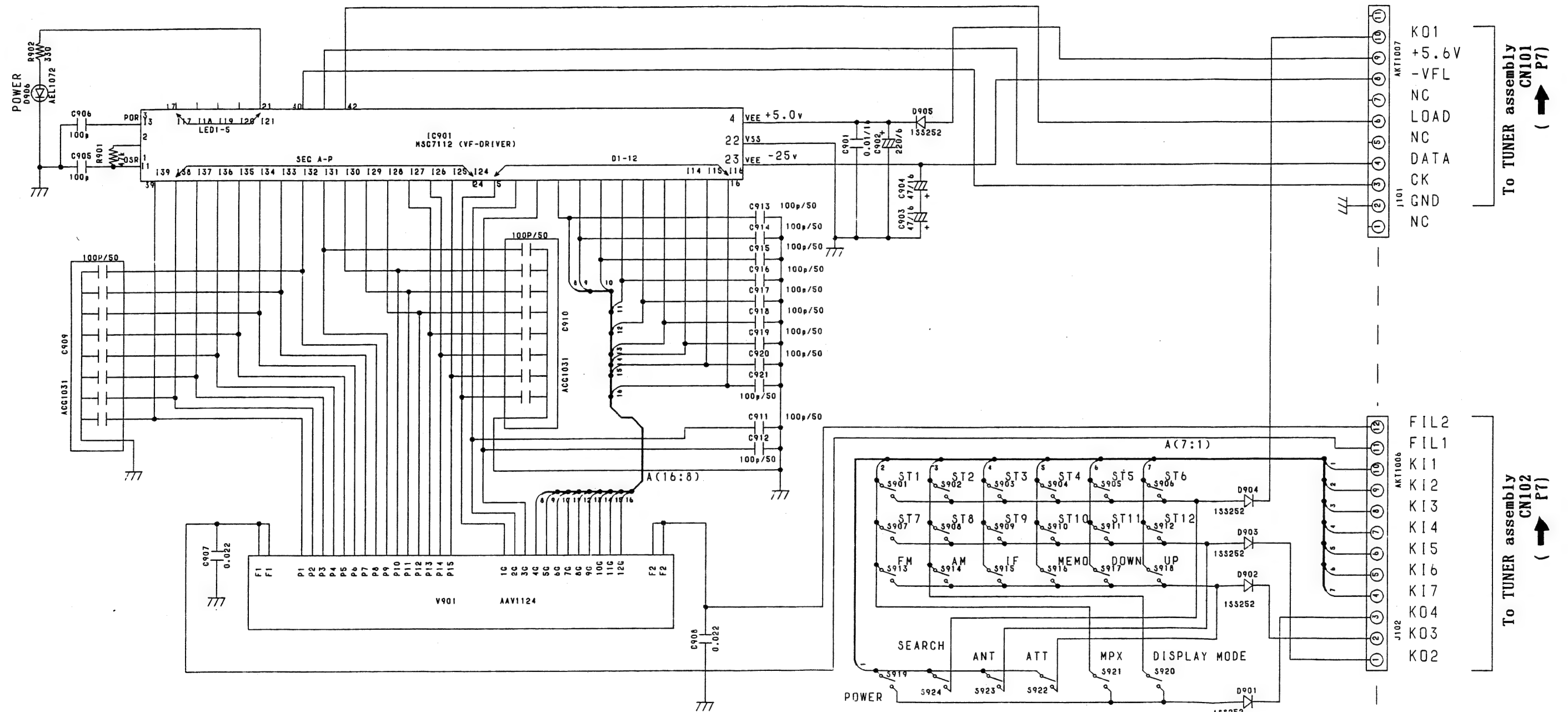
A

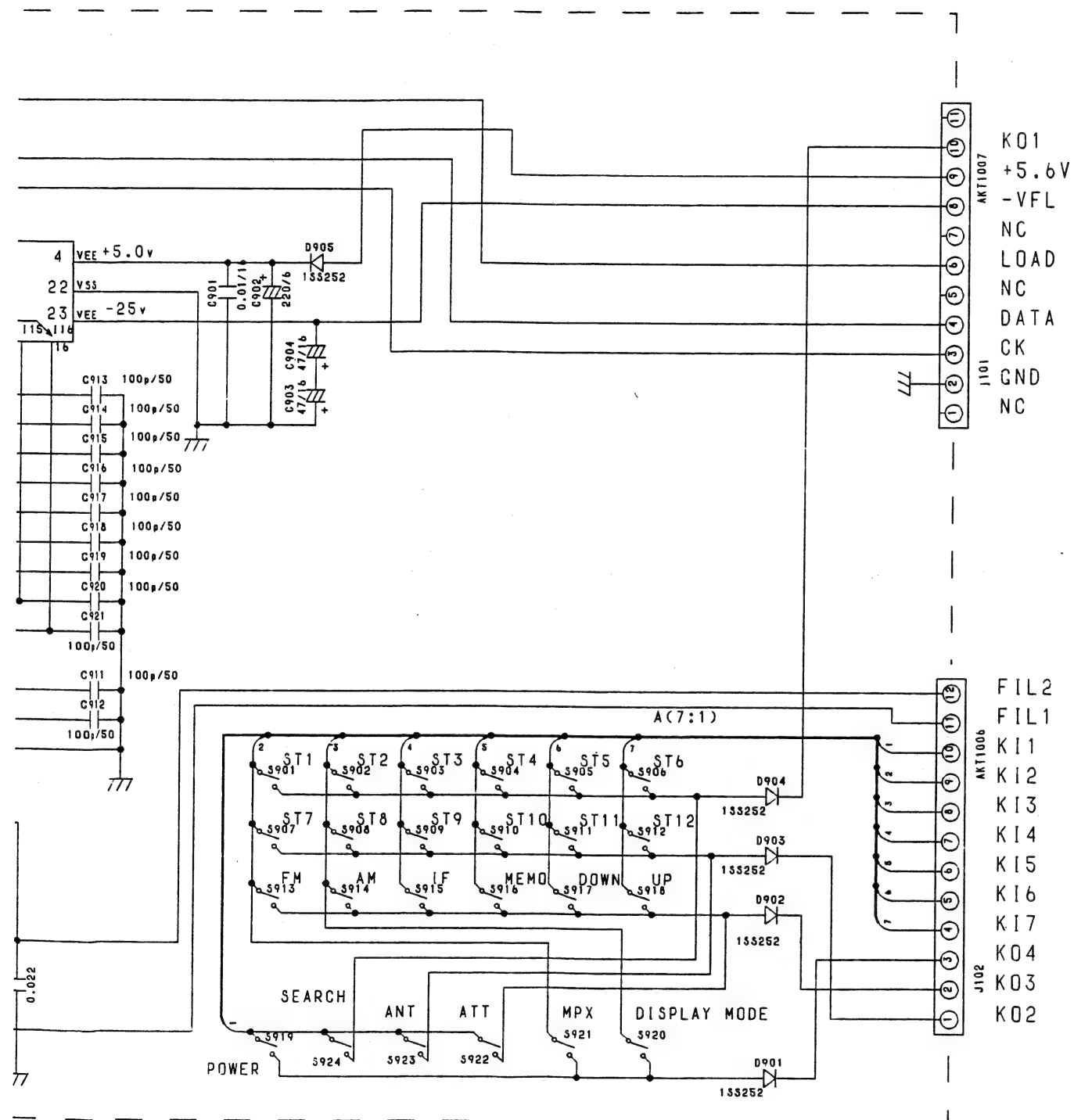
DISPLAY assembly (AWP1038)

B

C

D





- RESISTORS :**
Indicated in Ω , $1/4W$, $1/8W$, $\pm 5\%$ tolerance unless otherwise noted k; k Ω , M; M Ω , (F); $\pm 1\%$, (G); $\pm 2\%$, (K); $\pm 10\%$, (M); $\pm 20\%$ tolerance.
- CAPACITORS :**
Indicated in capacity (μF)/voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.
- VOLTAGE CURRENT :**
mA; DC current at no input signal.
mV; Signal voltage at FM 400Hz ± 75 Hz DEV.
• The table in the margin shows the DC voltage at no signal.
- OTHERS :**
→; Signal route.
⊗; Adjusting point.
The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

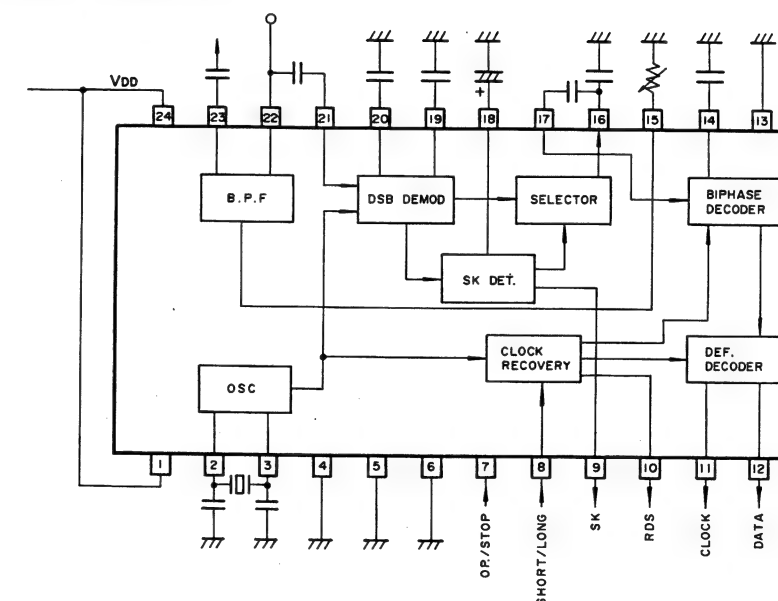
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES

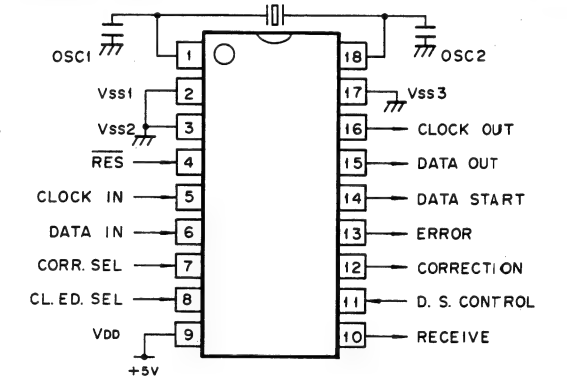
DISPLAY assembly

S901	ST1	S913	FM
S902	ST2	S914	AM
S903	ST3	S915	IF
S904	ST4	S916	MEMO
S905	ST5	S917	DOWN
S906	ST6	S918	UP
S907	ST7	S919	POWER
S908	ST8	S920	DISPLAY MODE
S909	ST9	S921	MPX
S910	ST10	S922	ATT
S911	ST11	S923	ANT
S912	ST12	S924	SEARCH

IC501 (PM4002)



IC502 (LC7073)



1. RESISTORS :

Indicated in Ω , 1/4W, 1/8W, $\pm 5\%$ tolerance unless otherwise noted k ; k Ω , M ; M Ω , (F) ; $\pm 1\%$, (G) ; $\pm 2\%$, (K) ; $\pm 10\%$, (M) ; $\pm 20\%$ tolerance.

2. CAPACITORS :

Indicated in capacity (μF) / voltage (V) unless otherwise noted p ; pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE CURRENT :

mA ; DC current at no input signal.

mV ; Signal voltage at FM 400Hz ± 75 Hz DEV.

• The table in the margin shows the DC voltage at no signal.

4. OTHERS :

→ ; Signal route.

⊗ ; Adjusting point.

The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

* marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES

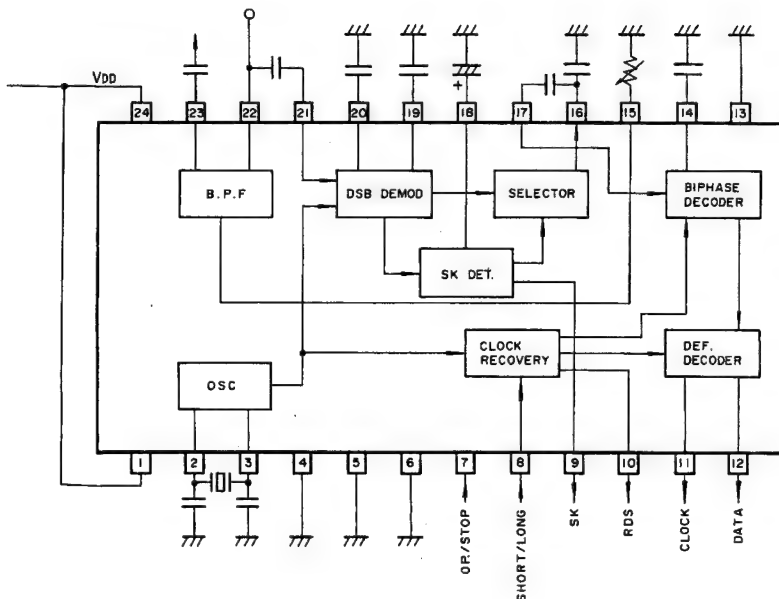
DISPLAY assembly

S901	ST1	S913	FM
S902	ST2	S914	AM
S903	ST3	S915	IF
S904	ST4	S916	MEMO
S905	ST5	S917	DOWN
S906	ST6	S918	UP
S907	ST7	S919	POWER
S908	ST8	S920	DISPLAY MODE
S909	ST9	S921	MPX
S910	ST10	S922	ATT
S911	ST11	S923	ANT
S912	ST12	S924	SEARCH

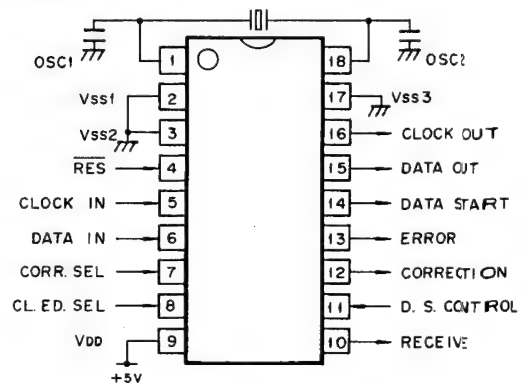
A

B

IC501 (PM4002)



IC502 (LC7073)



C

D

3. PCB's PARTS LIST

3.1 FOR F-550RDS/HE AND HB TYPES

NOTES:

- Part without part number cannot be supplied.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω	56 $\times 10^1$	561.....	RD1/8PM \square \square \square J
47k Ω	47 $\times 10^3$	473.....	RD1/4PS \square \square \square J
0.5 Ω	0R5.....		RN2H \square \square \square K
1 Ω	010.....		RSIP \square \square \square K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω	562 $\times 10^1$	5621.....	RN1/4SR \square \square \square F
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Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
● TUNER ASSEMBLY (AWZ3695)			Q501	TRANSISTOR	2SA1529
SEMICONDUCTORS			Q502	TRANSISTOR	2SC2668
IC151, 152	AMPLIFIER IC	TA7060AP	Q503	TRANSISTOR	XDC124ES
IC201	FM IC	PA5008	D107	DIODE	1SS252
IC231	MPX IC	PA5007	D108	DIODE	1SV156
IC301	AM/FM IC	LA1265S	D151-158	DIODE	1SS85
IC321	PLL IC	LM7001	D201	DIODE	1SS252
IC351	REGULATOR IC	NJM78M56FAS	D232-234	DIODE	1SS252
IC352	REGULATOR IC	MC7812CT	Δ D351-354	DIODE	S5566
IC401	TUNER CONTROL	PD5164A	Δ D357, 358	DIODE	S5566
	μ -COM		D359	ZENER DIODE	RD30ESB2
IC453-456	OP-AMP IC	NJM4558S-X	D361	DIODE	1SS252
IC501	RDS	PM4002	D362	ZENER DIODE	RD5.6ESB
IC502	RDS	LC7073	D363, 381	DIODE	1SS252
Q101	TRANSISTOR	XDA143ES	D401-403	DIODE	1SS252
Q102	TRANSISTOR	2SC1740S	D405	ZENER DIODE	RD5.1ESB1
Q103	TRANSISTOR	XDA143ES	D501	DIODE	1SS252
Q107	TRANSISTOR	2SC2705	RELAY		
Q108	TRANSISTOR	2SC2603	RY101	RELAY	ASR-087
Q151, 152	TRANSISTOR	XDA143ES	COILS & TRANSFORMER		
Q153-155	TRANSISTOR	2SC2668	F151	CERAMIC FILTER	ATF-109
Q201	N-FET	2SK246	F152	CERAMIC FILTER	ATF1094
Q281, 282	N-FET	2SK117	F153, 154	CERAMIC FILTER	ATF-119
Q283, 284	N-FET	2SK246	F155	CERAMIC FILTER	ATF1094
Q301	TRANSISTOR	2SC1740S	F301	CERAMIC FILTER	ATF1042
Q321	N-FET	2SK246	L101, 152	AXIAL INDUCTOR	LAU2R2M
Q322	TRANSISTOR	2SC1740SLN	L231	COIL	ATM1003
Q351	TRANSISTOR	2SA1529	L321	AXIAL INDUCTOR	LAU2R2M
Q352, 353	TRANSISTOR	XDC143ES	L501	AXIAL INDUCTOR	LAU101K
Q354	TRANSISTOR	2SA1306A	T201	IF TRANSFORMER	ATE-068
Q355	TRANSISTOR	XDA143ES	CAPACITORS		
Q356-359	TRANSISTOR	2SC2878	C101	CERAMIC CAPACITOR	CKDYX10 \square M25
Q381	TRANSISTOR	2SC1740S	C102, 103	CERAMIC CAPACITOR	CKPUYY10 \square M16
Q401	TRANSISTOR	XDC143ES			

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
C104	CERAMIC CAPACITOR	CKDYF473Z50	C304	ELECTR.CAPACITOR	CEAS100M50
C106	CERAMIC CAPACITOR	CKDYF223Z50	C305	ELECTR.CAPACITOR	CEANP4R7M35
C107	CERAMIC CAPACITOR	CKPUYY103M16			
C108-110	CERAMIC CAPACITOR	CKDYX103M25	C306	ELECTR.CAPACITOR	CEAS4R7M50
C111	CERAMIC CAPACITOR	CKPUYB102K50	C307	CERAMIC CAPACITOR	CKDYB222K50
C112	CERAMIC CAPACITOR	CKDYX103M25	C308	CERAMIC CAPACITOR	CKDYX473M25
C151, 152	CERAMIC CAPACITOR	CKDYF223Z50	C309	CERAMIC CAPACITOR	CKDYF223Z50
C153	CERAMIC CAPACITOR	CKDYX473M25	C310	CERAMIC CAPACITOR	CKPUYY103M16
C154	CERAMIC CAPACITOR	CKPUYY103M16	C311	ELECTR.CAPACITOR	CEAS470M10
C156, 157	CERAMIC CAPACITOR	CKDYX103M25	C312	CERAMIC CAPACITOR	CKPUYY103M16
C158	CERAMIC CAPACITOR	CKDYX473M25	C313	CERAMIC CAPACITOR	CKDYF223Z50
C159	CERAMIC CAPACITOR	CKPUYY103M16	C314	CERAMIC CAPACITOR	CKPUYY103M16
C201	CERAMIC CAPACITOR	CCMCH150J50	C315	CERAMIC CAPACITOR	CKDYF223Z50
C202	CERAMIC CAPACITOR	CCMCH330J50	C321, 322	CERAMIC CAPACITOR	CCMCH150J50
C203	ELECTR.CAPACITOR	CEAS010M50	C323-325	AXIAL CERAMIC C.	CCPUSL470J50
C205	CERAMIC CAPACITOR	CKPUYY103M16	C326, 327	CERAMIC CAPACITOR	CKPUYY103M16
C206	ELECTROLYTIC CAPACIT	CEEA101M16	C328	AXIAL CERAMIC C.	CCPUSL470J50
C207, 208	CERAMIC CAPACITOR	CKDYX473M25	C329	ELECTR.CAPACITOR	CEAS330M16
C209	CERAMIC CAPACITOR	CKPUYY103M16	C330	AUDIO FILM CAPACITOR	CFTXA224J50
C210	ELECTR.CAPACITOR	CEAS010M50	C331	CERAMIC CAPACITOR	CKPUYY103M16
C211	CERAMIC CAPACITOR	CKPUYY103M16	△ C351	CAPACITOR (0.047μ)	ACG-009-0
C212	ELECTR.CAPACITOR	CEAS010M50	C352	ELECTROLYTIC CAPACIT	CEEA222M35
C213, 214	CERAMIC CAPACITOR	CKMYB181K50	C354	ELECTR.CAPACITOR	CEAS330M16
C215	ELECTR.CAPACITOR	CEAS4R7M50	C355	ELECTR.CAPACITOR	CEAS221M25
C216	CERAMIC CAPACITOR	CKPUYY103M16	C357	CERAMIC CAPACITOR	CKDYF473Z50
C217	ELECTROLYTIC CAPACIT	CEEA101M16	C358	ELECTROLYTIC CAPACIT	CEAS102M35
C231	ELECTR.CAPACITOR	CEAS220M25	C359	ELECTROLYTIC CAPACIT	CEAS470M35
C232	AUDIO FILM CAPACITOR	CFTXA473J50	C360	ELECTR.CAPACITOR	CEAS101M35
C233	CERAMIC CAPACITOR	CKDYB152K50	C361	ELECTR.CAPACITOR	CEAS470M10
C234	ELECTROLYTIC CAPACIT	CEAS1R5M50	C381	CERAMIC CAPACITOR	CKPUYB101K50
C235	ELECTR.CAPACITOR	CEAS100M50	C401	CERAMIC CAPACITOR	CKPUYY103M16
C236	CKA (390P/50V)	ACG-023	C402	ELECTR.CAPACITOR	CEAS221M10
C237	ELECTROLYTIC CAPACIT	CEAS6R8M50	C404	CEA (47000/5.5V)	ACH1037
C238, 239	ELECTR.CAPACITOR	CEAS100M50	C405	ELECTR.CAPACITOR	CEAS010M50
C240	PL.STYRENE CAPACITOR	CQSA682J50	C406	CERAMIC CAPACITOR	CKPUYB101K50
C241	ELECTR.CAPACITOR	CEAS220M25	C407	CERAMIC CAPACITOR	CKPUYB102K50
C242, 243	MYLOR FILM CAPACITOR	CQMA152J50	C409	CERAMIC CAPACITOR	CKPUYB101K50
C244	ELECTR.CAPACITOR	CEAS470M10	C410	CERAMIC CAPACITOR	CKDYX103M25
C245	ELECTROLYTIC CAPACIT	CEEA102M16	C411	ELECTR.CAPACITOR	CEAS101M50
C246, 247	CERAMIC CAPACITOR	CKPUYY103M16	C456, 457	ELECTROLYTIC CAPACIT	CEEANP4R7M25
C248	ELECTROLYTIC CAPACIT	CEEA221M16	C487-496	MYLOR FILM CAPACITOR	CQMA103J50
C249, 250	ELECTROLYTIC CAPACIT	CEEA4R7M25	C501	CERAMIC CAPACITOR	CKPUYY103M16
C251, 252	CERAMIC CAPACITOR	CKDYB472K50	C502, 503	CERAMIC CAPACITOR	CCDCH120J50
C281	ELECTR.CAPACITOR	CEAS010M50	C504	CERAMIC CAPACITOR	CKDYX103M25
C301	CERAMIC CAPACITOR	CKPUYY103M16	C505	CERAMIC CAPACITOR	CKDYX173M25
C302	ELECTR.CAPACITOR	CEAS330M16	C506	CERAMIC CAPACITOR	CKDYX123M25
			C507	ELECTR.CAPACITOR	CEAS222M50
			C508, 509	CERAMIC CAPACITOR	CKDYB132K50
			C510, 511	CERAMIC CAPACITOR	CKDYB172K50
			C512	CERAMIC CAPACITOR	CKPUYY103M16
			C513	ELECTR.CAPACITOR	CEAS470M10

Mark No.	Description	Parts No.
C514	CERAMIC CAPACITOR	CKDYB102K50
C515	CERAMIC CAPACITOR	CKPUYY103M16
C516	ELECTR.CAPACITOR	CEAS101M35

RESISTORS

VR201, 202	VR	ACP1042
VR203	VR	ACP1040
VR204	VR	ACP1043
VR205	VR	ACP1046
VR206	VR	ACP1038
VR231	VR	VRTS6VS222
VR232, 281	VR	ACP1044
VR282, 301	VR	ACP1043
VR501	VR	ACP1045

R102	CARBON FILM RESISTOR	RD1/2PM751J
R202, 203	CARBON FILM RESISTOR	RDR1/4PM103J
R204, 205	CARBON FILM RESISTOR	RDR1/4PM332J
R235	METALFILM RESISTER	RN1/4PQ5601F
R237, 238	CARBON FILM RESISTOR	RDR1/4PM223J

R241, 242	CARBON FILM RESISTOR	RDR1/4PM333J
R245, 246	CARBON FILM RESISTOR	RDR1/4PM333J
R247-250	CARBON FILM RESISTOR	RDR1/4PM102J
R251, 252	CARBON FILM RESISTOR	RDR1/4PM152J
R281, 282	CARBON FILM RESISTOR	RDR1/4PM331J

R353	CARBONFILM RESISTOR	RD1/2PM471J
R354	FUSIBLE RESISTOR	RFA1/4PS100J
R355	CARBON FILM RESISTOR	RD1/2PM222J
R358-361	CARBON FILM RESISTOR	RD1/4PM010J
R437	RESISTOR ARRAY(22K)	RA8T223J

R455, 456	CARBON FILM RESISTOR	RDR1/6PU103J
R457, 458	CARBON FILM RESISTOR	RDR1/4PM122J
R459, 460	CARBON FILM RESISTOR	RDR1/4PM132J
R461-464	CARBON FILM RESISTOR	RDR1/4PM361J
R465, 466	CARBON FILM RESISTOR	RDR1/6PU122J

R467, 468	CARBON FILM RESISTOR	RDR1/6PU102J
R469, 470	CARBON FILM RESISTOR	RDR1/4PM181J
R471-478	CARBON FILM RESISTOR	RDR1/6PU102J

Mark No.	Description	Parts No.
	Other resistors	RD1/8PM□□□J

OTHERS

PIN JACK 2P (OUTPUT)	AKB1039
TERMINAL 2-P (ANTENNA)	AKE-060
JACK (CONTROL)	AKN-207
SOCKET (ANTENNA FM)	AKX1034
4 SERIAL F.E. MODULE ASSEMBLY	AXQ1004
AM RF TUNING BLOCK	AXX1011

CN101	CONNECTOR(10P)	KPE10
CN102	CONNECTOR(12P)	KPE12

X301	CERAMIC RESONATOR	ATF1027
X321	CRYSTAL RESONATOR	ASS1005
X401	CERAMIC RESONATOR	ASS1055
X501	CRYSTAL RESONATOR	ASS1061
X502	CERAMIC RESONATOR	ASS1025

TH201	THERMISTOR	TH103-2
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● POWER ASSEMBLY (AWZ3697)

TRANSFORMER

△ T351	POWER TRANSFORMER	ATT1168
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DISPLAY ASSEMBLY (AWP1038)

SEMICONDUCTORS

IC901	FL DRIVER IC	MSC7112-01SS
D901-905	DIODE	1SS252
D906	LED	AEL1072

SWITCHES

S901-924	SWITCH	ASG1034
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CAPACITORS

C901	CERAMIC CAPACITOR	CKPUYY103M16
C902	ELECTR.CAPACITOR	CEJA221M6
C903, 904	ELECTROLYTIC CAPACIT	CEJA470M16
C905, 906	CERAMIC CAPACITOR	CKPUYB101K50
C907, 908	CERAMIC CAPACITOR	CKDYF223Z50
C909, 910	CAPACITOR ARRAY (100p/50)	ACG1031
C911-921	CERAMIC CAPACITOR	CKPUYB101K50

RESISTORS

All resistors	RD1/8PM□□□J
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OTHERS

V901	FL TUBE	AAV1124
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3.2 FOR F – 550RDS/HEWZI TYPE

NOTES:

- Part without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

● TUNER assembly (AWZ3694)

The TUNER assembly (AWZ3694) is the same as the TUNER assembly (AWZ3695) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ3695	AWZ3694	
	L102 – L104 L232 L233, L234	..... ..... .....	LAU220K LAU010M LAU100K	
	TC101 C253	..... .....	ACM – 018 CKDYX103M25	
	R153, R154, R162 R247, R248 R249, R250 R251, R252	RD1/8PM102J RD1/8PM102J RDR1/4PM102J RDR1/4PM152J	RD1/8PM471J RDR1/4PM822J RDR1/4PM821J RDR1/4PM222J	
	AM RF Tuning block	AXX1011	AXX1014	

● POWER assembly (AWZ3696)

The POWER assembly (AWZ3696) is the same as the POWER assembly (AWZ3697) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ3697	AWZ3696	
Δ	L351	.....	ATF – 163	
Δ	C353 (0.01/AC400V)	.....	ACG1002	

4. ADJUSTMENTS

The F – 550RDS/HE, HB and HEWZI types are the same as the F – 676/HEWZ type with the exception of the following sections.

4.1 FM MONO

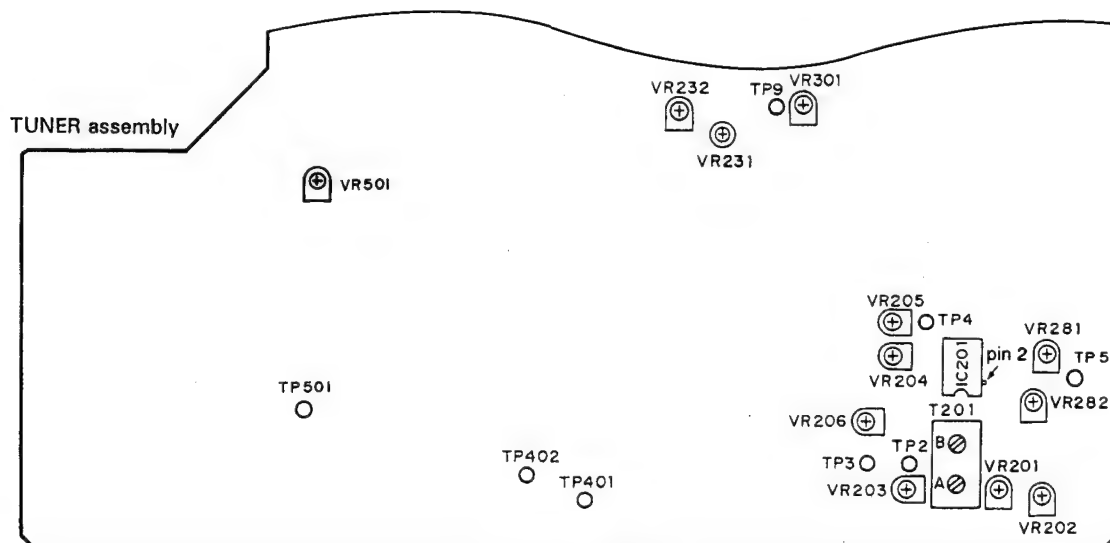
Step	Adjustment Name	FM SG (1kHz±75kHz dev.)			FL display, IF BAND etc.	Location	Adjustment	Content of change
		Frequency	Modulation	Level				
3	Sub-balance adjustment	98MHz	MONO	60dB μ	98MHz NORMAL	VR206	Adjust so that the AC voltage at TP5 becomes minimum.	Adjustment ; IC201 → TP5

4.2 FM STEREO

Step	Adjustment Name	FM SG (1kHz±75kHz dev.)			FL display, IF BAND etc.	Location	Adjustment	Content of change
		Frequency	Modulation	Level				
7	Noise reduction adjustment	89MHz	L-ONLY	60dB μ	89MHz NORMAL MPX NR : ON/OFF	VR451	Adjust so that the output level, when ON, becomes +1%dB when the MPX NR of the main unit is OFF.	Deleted.

4.3 FM ETC

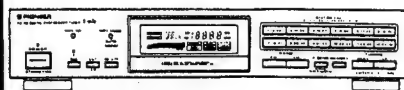
Step	Adjustment Name	FM SG (1kHz±75kHz dev.)			FL display, IF BAND etc.	Location	Adjustment	Content of change
		Frequency	Modulation	Level				
3	SK level adjustment	88MHz	RF SG (External)	60dB μ	88MHz NORMAL (ATT ON)	VR501	Adjust so that the voltage between TP501 (57kHz) and GND becomes maximum.	Added.



Service Manual

PIONEER®
The Art of Entertainment

PION-03020



ORDER NO.
ARP2242

FM/AM DIGITAL SYNTHESIZER TUNER

F-676

F-676-S

F-676, F-676-S AND F-51 HAVE THE FOLLOWING:

Type	Model			Power Requirement	Remarks
	F-676	F-676-S	F-51		
HEWZ	○	○	—	AC220V-230V, 240V (switchable) *	
HE	○	—	—	AC220V-230V, 240V (switchable) *	
HB	○	—	—	AC220V-230V, 240V (switchable) *	
HIX1B	○	—	—	AC220V-230V, 240V (switchable) *	
KU	—	—	○	AC120V only	

* Change the primary wiring of the power transformer.

- This manual is applicable to the F-676/HEWZ, HE, HB and F-676-S/HEWZ types.
- As to the F-676/HE, HB and F-676-S/HEWZ types, refer to page 33.
- As to the other types, refer to applicable service manuals.
- The F-676-S is the same as the F-676 except for color.
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS SERVICE INC. P.O. Box 1760, Long Beach, California 90801 U.S.A.
PIONEER ELECTRONICS OF CANADA, INC. 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada
PIONEER ELECTRONIC [EUROPE] N.V. Keetberglaan 1, 9120 Beveren, Belgium
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-991
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SV APR. 1991

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2. EXPLODED VIEWS, PACKING AND PARTS LIST.....	3	6. RÉGLAGES	27
3. SCHEMATIC DIAGRAM.....	6	6. AJUSTES	30
4. P.C. BOARDS CONNECTION DIAGRAM	15	7. FOR F-676/HE, HB AND F-676-S/HEWZ TYPES	33
5. P.C.B.'s PARTS LIST	21	8. SPECIFICATIONS	35
		9. PANEL FACILITIES.....	36

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SAFETY INFORMATION

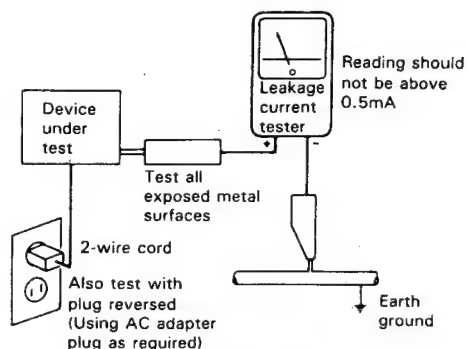
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

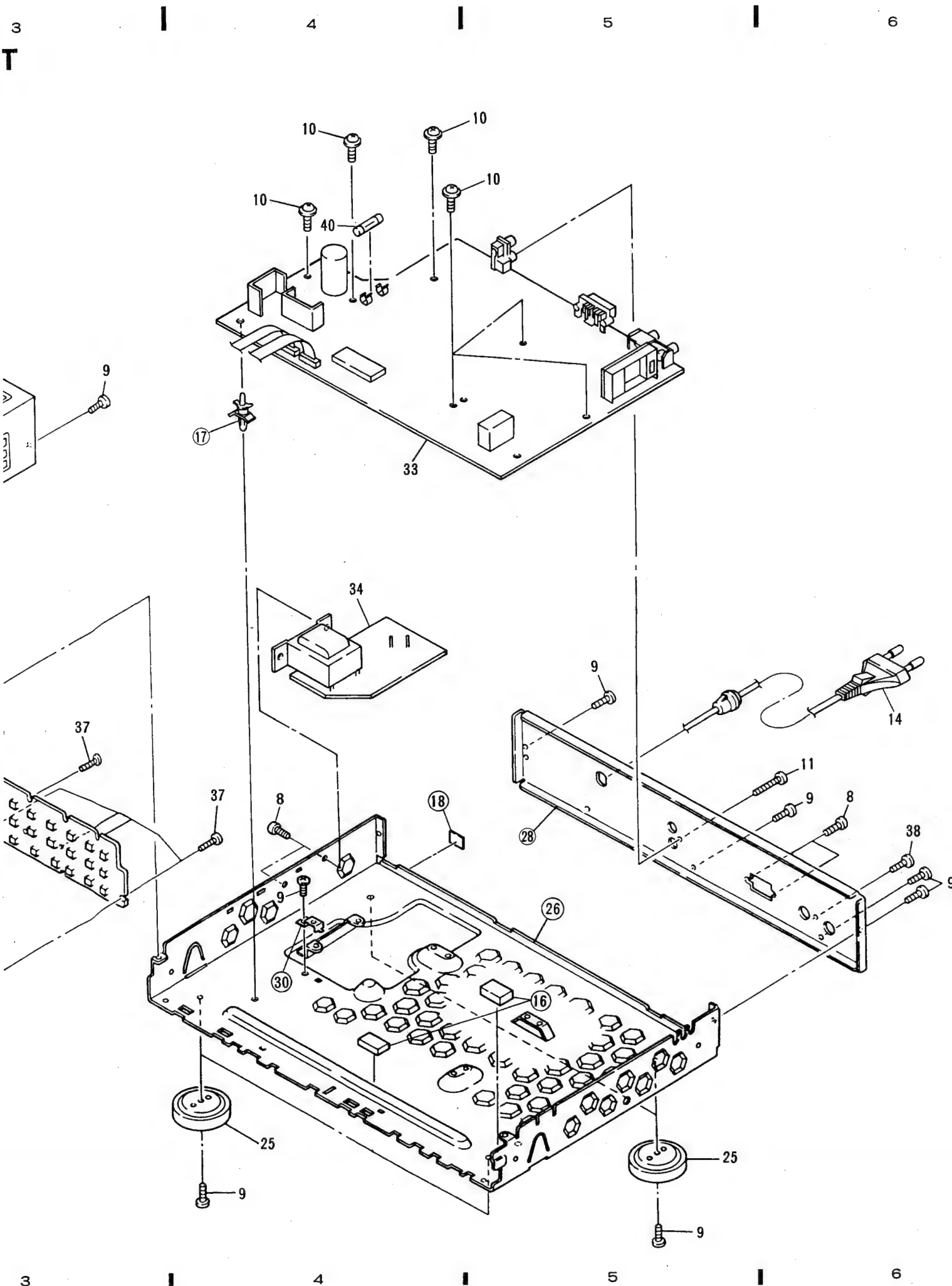
2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.



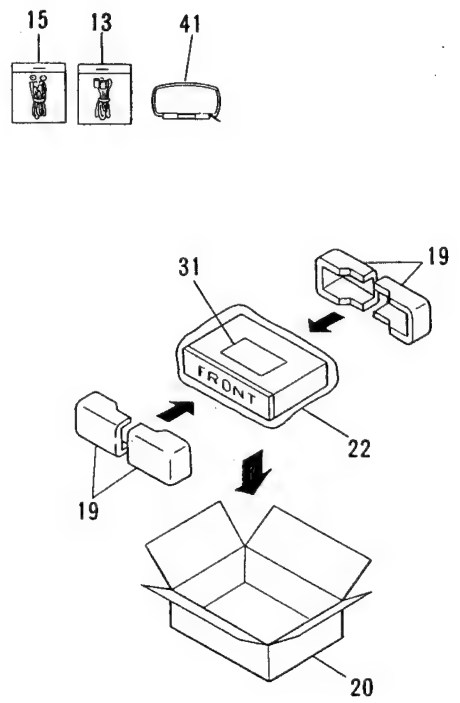
NOTES:

- Parts without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts List

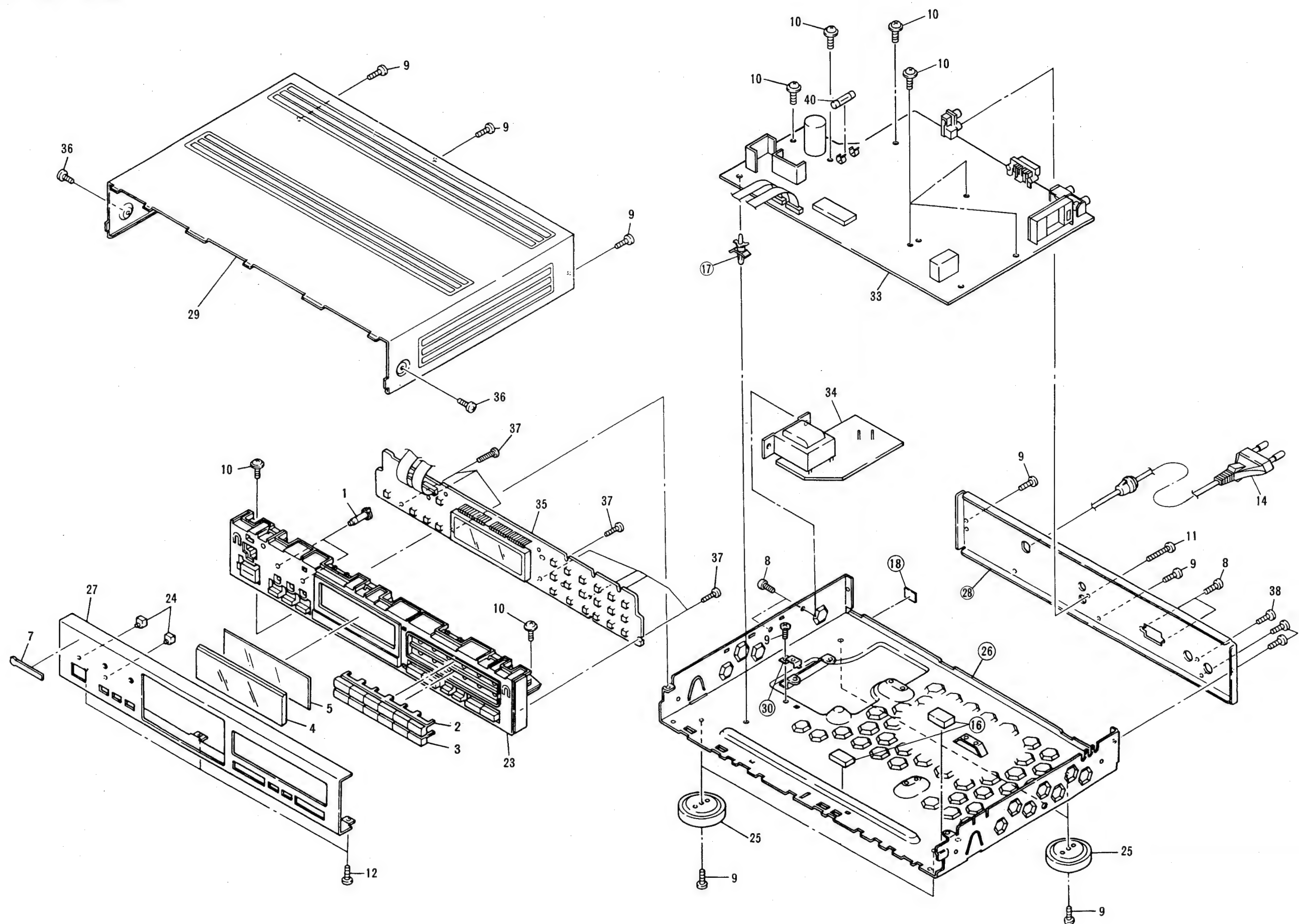
Mark	No.	Description	Part No.
	1	LIGHT ACTION BUTTON	AAD1733
	2	STATION BUTTON(ABS)	AAD1751
		(1/13/25 - 6/18/30)	
	3	STATION BUTTON(ABS)	AAD1752
		(7/19/31 - 12/24/36)	
	4	PANEL	AAK1685
	5	FL FILTER	AAK1785
	6	.....
	7	NAME PLATE (METAL)	AAM1029
	8	SCREW	ABA - 298
	9	SCREW (STEEL)	ABA1009
	10	SCREW (STEEL)	ABA1011
	11	SCREW (STEEL)	ABA1047
	12	SCREW (STEEL)	ABA1048
	13	PLUG CORD	ADE - 044
Δ	14	AC POWER CORD	ADG1010
	15	FM ANTENNA	ADH1002
	16	CUSHION (RUBBER)	
	17	.....
	18	SPACER	
	19	FRONT REAR PAD	AHA1095
	20	PACKING CASE	AHD2053
	21	.....
	22	PACKING SHEET	AHG1017
	23	PANEL BASE	AMB1815
	24	INDICATING LENS	AMR1160
	25	INSULATOR ASSY	AMR2140
	26	CHASSIS ASSY	
	27	FRONT PANEL	ANB1449
	28	REAR PANEL	
	29	BONNET	AZN1745
	30	PCB HOLDER	
	31	OPREATING INSTRUCTIONS (GERMAN)	ARC1263
	32	.....
⊙	33	TUNER ASSEMBLY	AWZ3635
⊙	34	POWER ASSEMBLY	AWZ3639
	35	DISPLAY ASSEMBLY	AWP1034
	36	SCREW	BBT30P060FZK
	37	SCREW	BPZ26P080FMC
	38	SCREW	VMZ30P060FCU
	39	.....
Δ	40	FU1 FUSE (T400MA)	AEK - 504
	41	L1 LOOP ANTENNA	ATB1006

Packing



2. EXPLODED VIEWS, PACKING AND PARTS LIST

EXPLODED VIEWS



NOT
• Part
• The
to u
• Part

Part
Mar

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△

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3. SCHEMATIC DIAGRAM

3.1 DISPLAY ASSEMBLY (AWP1034)

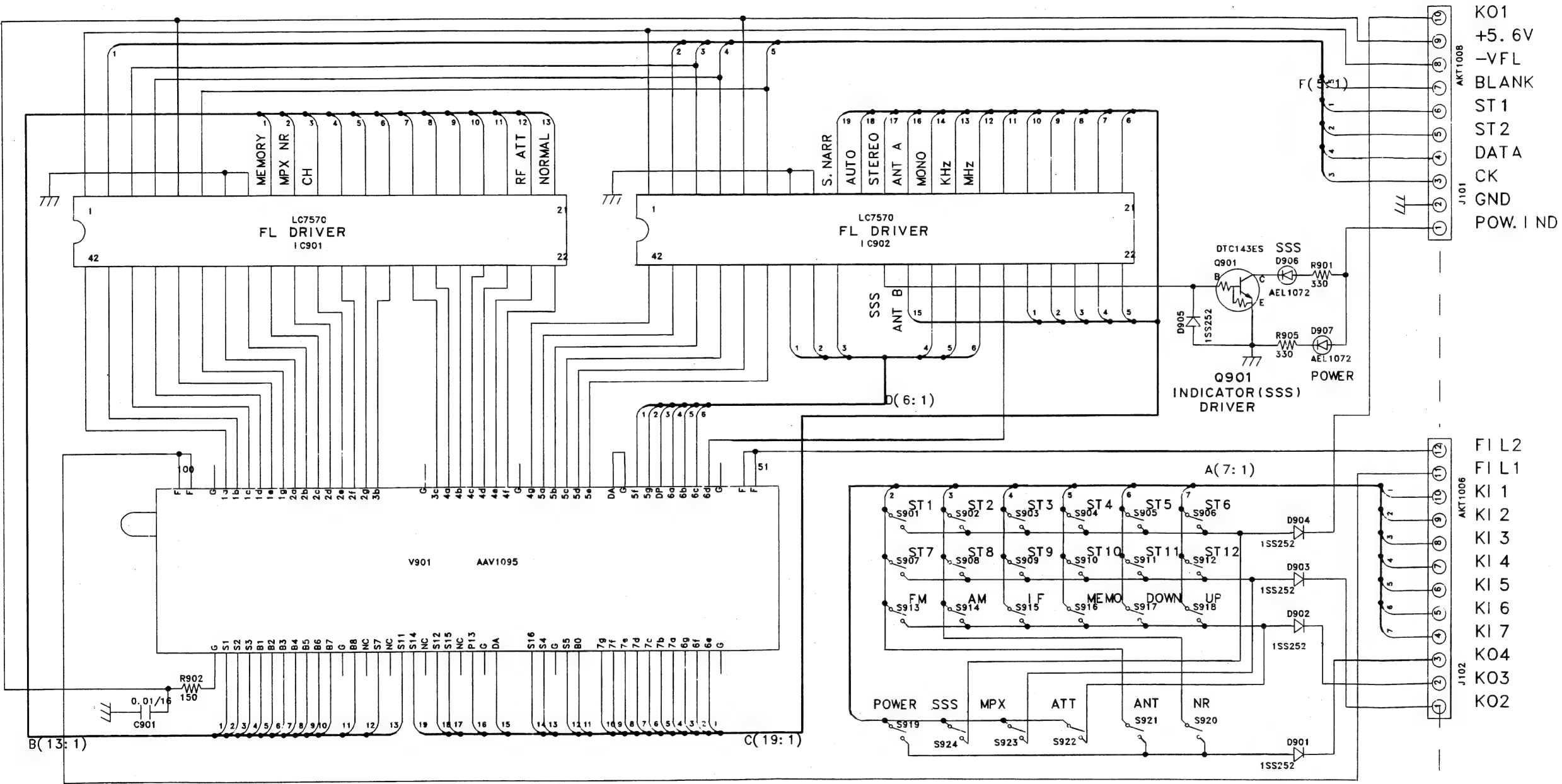
A

B

C

D

DISPLAY ASSEMBLY (AWP1034)



TO
TUNER
ASSEMBLY
CN101
(→ P13)

TO
TUNER
ASSEMBLY
CN102
(→ P13)

- 1. RESISTORS :
Indicated in Ω, 1
noted k ; k Ω, M
(M) ; ± 20 % toler
 - 2. CAPACITORS :
Indicated in capaci
Indication without
 - 3. VOLTAGE CURRE
← mA ; DC curren
mV ; Signal vol
• The table in th
 - 4. OTHERS :
→ ; Signal route.
⊗ ; Adjusting poi
The Δ mark for
importance of th
replacing, be sure
※ marked capaciti
- This is the basic
vary due to impr

IC151
(TA7060AP)

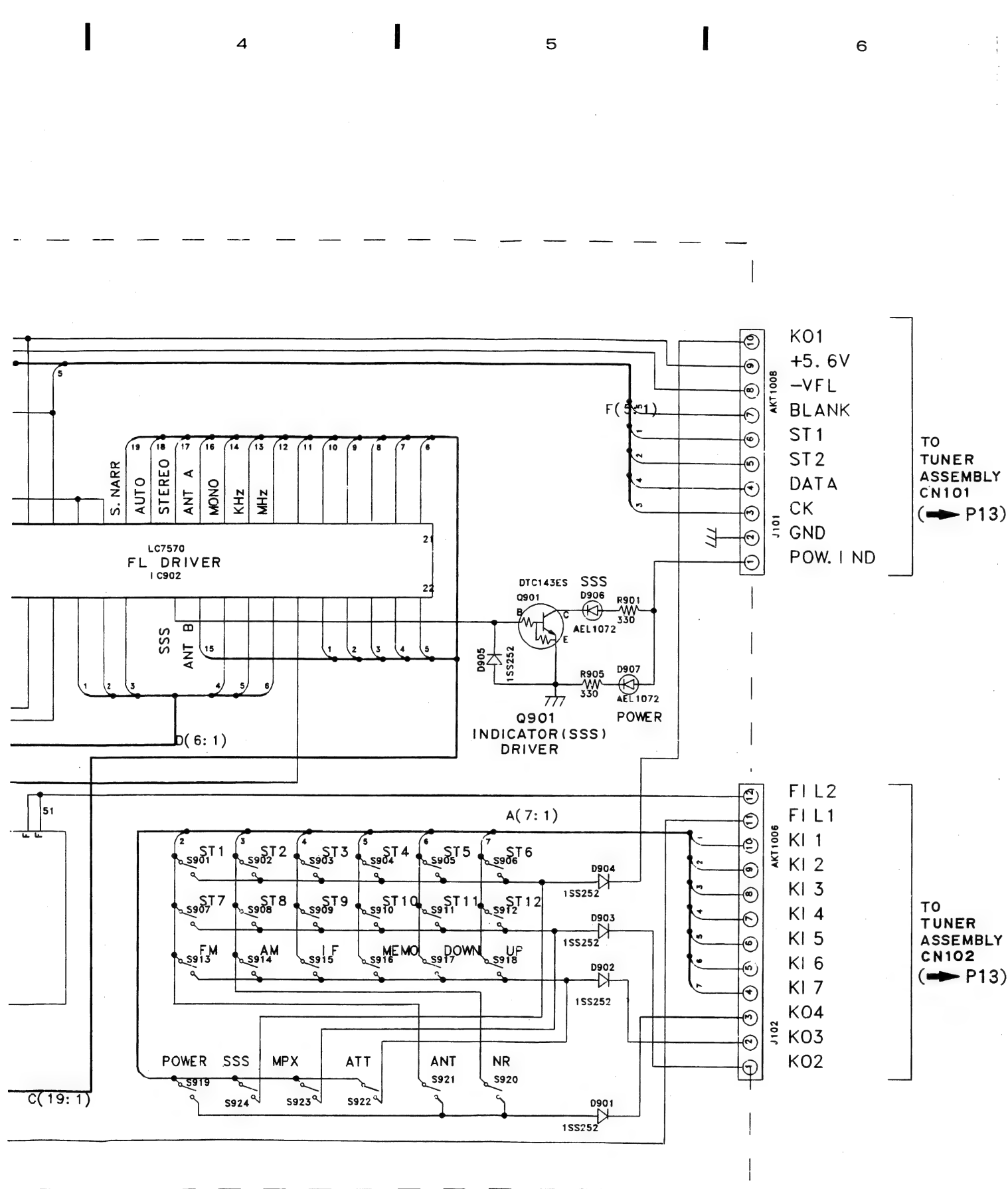
Pin No.	Volts
1	1.45
2	1.45
3	0
4	9.14
5	11.3

IC152
(TA7060AP)

Pin No.	Volts
1	1.47
2	1.47
3	0.0
4	8.96
5	11.3

IC452
(LA3607)

Pin No.	Volts	Pin No.
1	6.16	11
2	5.65	12
3	6.2	13
4	5.66	14
5	6.2	15
6	5.66	16
7	6.2	17
8	5.65	18
9	6.2	19
10	5.66	20



KO1
+5.6V
-VFL
BLANK
ST1
ST2
DATA
CK
GND
POW. IND

TO
TUNER
ASSEMBLY
CN101
(→ P13)

FIL 2
FIL 1
KI 1
KI 2
KI 3
KI 4
KI 5
KI 6
KI 7
KO4
KO3
KO2

TO
TUNER
ASSEMBLY
CN102
(→ P13)

- RESISTORS :**
Indicated in Ω , 1/4W, 1/8W, $\pm 5\%$ tolerance unless otherwise noted k; k Ω , M; M Ω , (F); $\pm 1\%$, (G); $\pm 2\%$, (K); $\pm 10\%$, (M); $\pm 20\%$ tolerance.
- CAPACITORS :**
Indicated in capacity (μF)/voltage (V) unless otherwise noted p; pF. Indication without voltage is 50V except electrolytic capacitor.
- VOLTAGE CURRENT :**
mA; DC current at no input signal.
mV; Signal voltage at FM 400Hz ± 75 Hz DEV.
• The table in the margin shows the DC voltage at no signal.
- OTHERS :**
→; Signal route.
⊗; Adjusting point.
The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
* marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

- SWITCHES (Underline indicates switch position)**
DISPLAY ASSEMBLY
S901 : ST1
S902 : ST2
S903 : ST3
S904 : ST4
S905 : ST5
S906 : ST6
S907 : ST7
S908 : ST8
S909 : ST9
S910 : ST10
S911 : ST11
S912 : ST12
S913 : FM
S914 : AM
S915 : IF
S916 : MEMO
S917 : DOWN
S918 : UP
S919 : POWER
S920 : NR
S921 : ANT
S922 : ATT
S923 : MPX
S924 : SSS

IC151
(TA7060AP)

Pin No.	Volts
1	1.45
2	1.45
3	0
4	9.14
5	11.3

IC152
(TA7060AP)

Pin No.	Volts
1	1.47
2	1.47
3	0.0
4	8.96
5	11.3

IC231
(PA5007)

Pin No.	Volts	Pin No.	Volts
1	6.96	16	12.3
2	3.08	17	0
3	3.07	18	0
4	3.07	19	6.23
5	1.43	20	6.23
6	5.34	21	6.23
7	3.09	22	6.23
8	3.09	23	6.2
9	0	24	6.2
10	6.99	25	6.21
11	9.15	26	6.22
12	8.84	27	5.51
13	22.7	28	5.44
14	5.28	29	6.22
15	6.3	30	6.22

IC452
(LA3607)

Pin No.	Volts	Pin No.	Volts
1	6.16	11	6.11
2	5.65	12	5.64
3	6.2	13	5.11
4	5.66	14	5.64
5	6.2	15	6.42
6	5.66	16	5.64
7	6.2	17	6.64
8	5.65	18	12.3
9	6.2	19	6.6
10	5.66	20	0

IC453
(NJM4558S)

Pin No.	Volts
1	12.3
2	6.22
3	6.16
4	6.21
5	0
6	6.2
7	6.17
8	6.23
9	12.3

IC454, IC455, IC456
(NJM4558S)

Pin No.	Volts
1	12.3
2	6.22
3	6.15
4	6.23
5	0
6	6.23
7	6.17
8	6.23
9	12.3

IC301
(LA1265S)

Pin No.	Volts	Pin No.	Volts
1	2.31	12	1.47
2	2.31	13	0.6
3	2.31	14	0.9
4	0	15	2.31
5	12.3	16	1.4
6	12.3	17	0
7	12.3	18	0
8	12.4	19	0
9	12.2	20	0.6
10	2.28	21	3.87
11	1.54	22	2.7

IC451
(PA0042)

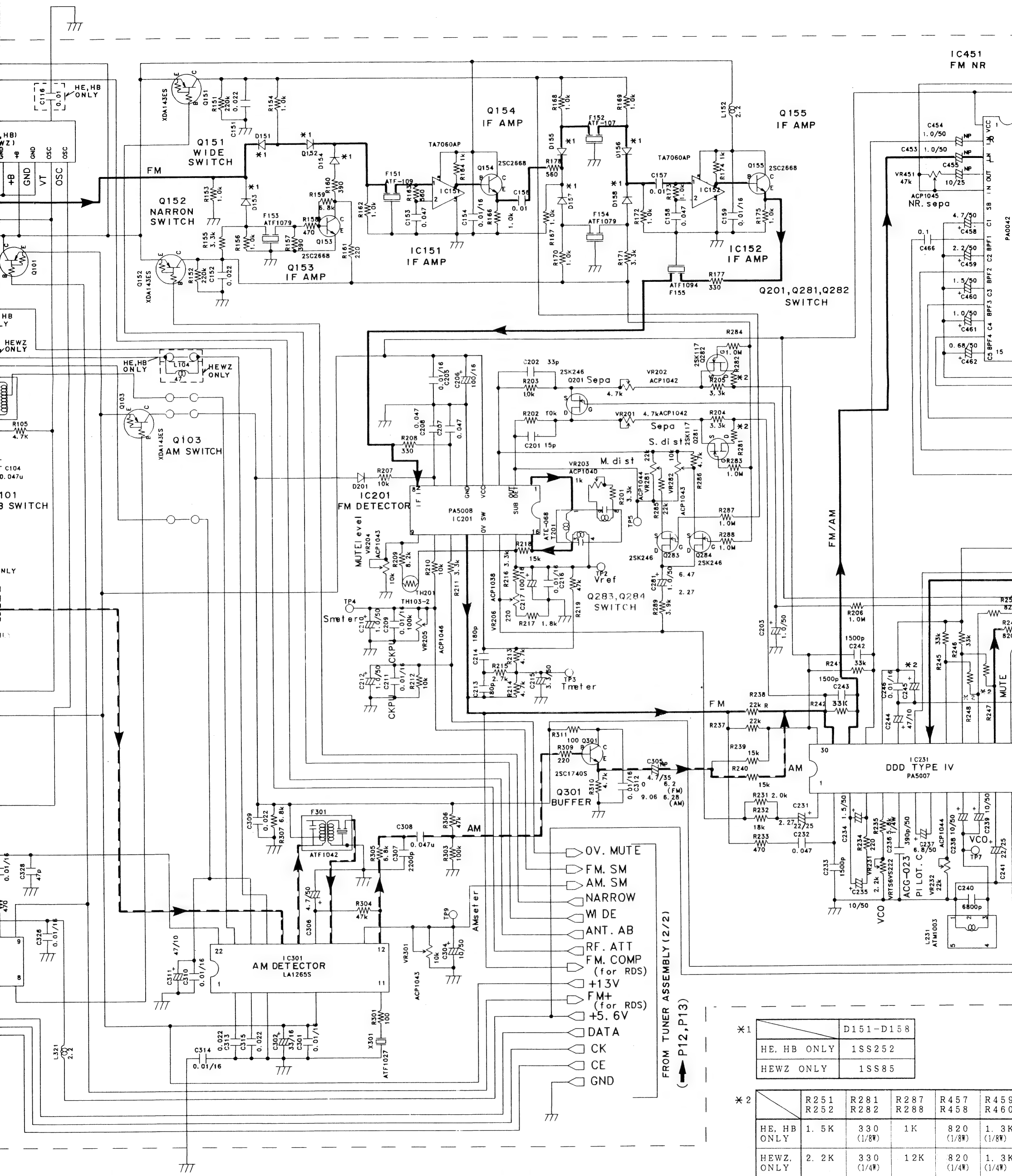
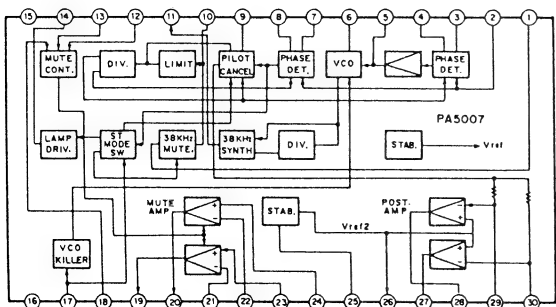
Pin No.	Volts	Pin No.	Volts
1	12.3	16	6.34
2	6.13	17	6.32
3	6.13	18	6.35
4	6.33	19	6.31
5	6.33	20	6.35
6	6.33	21	6.31
7	6.32	22	6.34
8	6.35	23	0
9	6.32	24	0
10	6.35	25	0
11	6.32	26	6.34
12	6.34	27	6.34
13	6.32	28	6.35
14	6.35	29	6.34
15	6.32	30	0

A

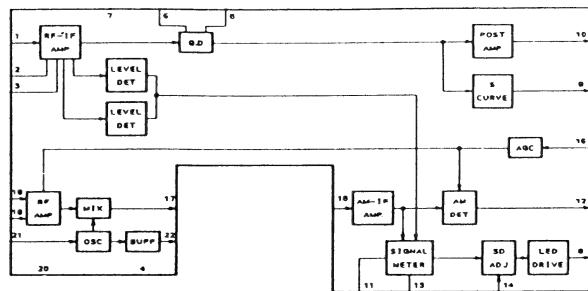
B

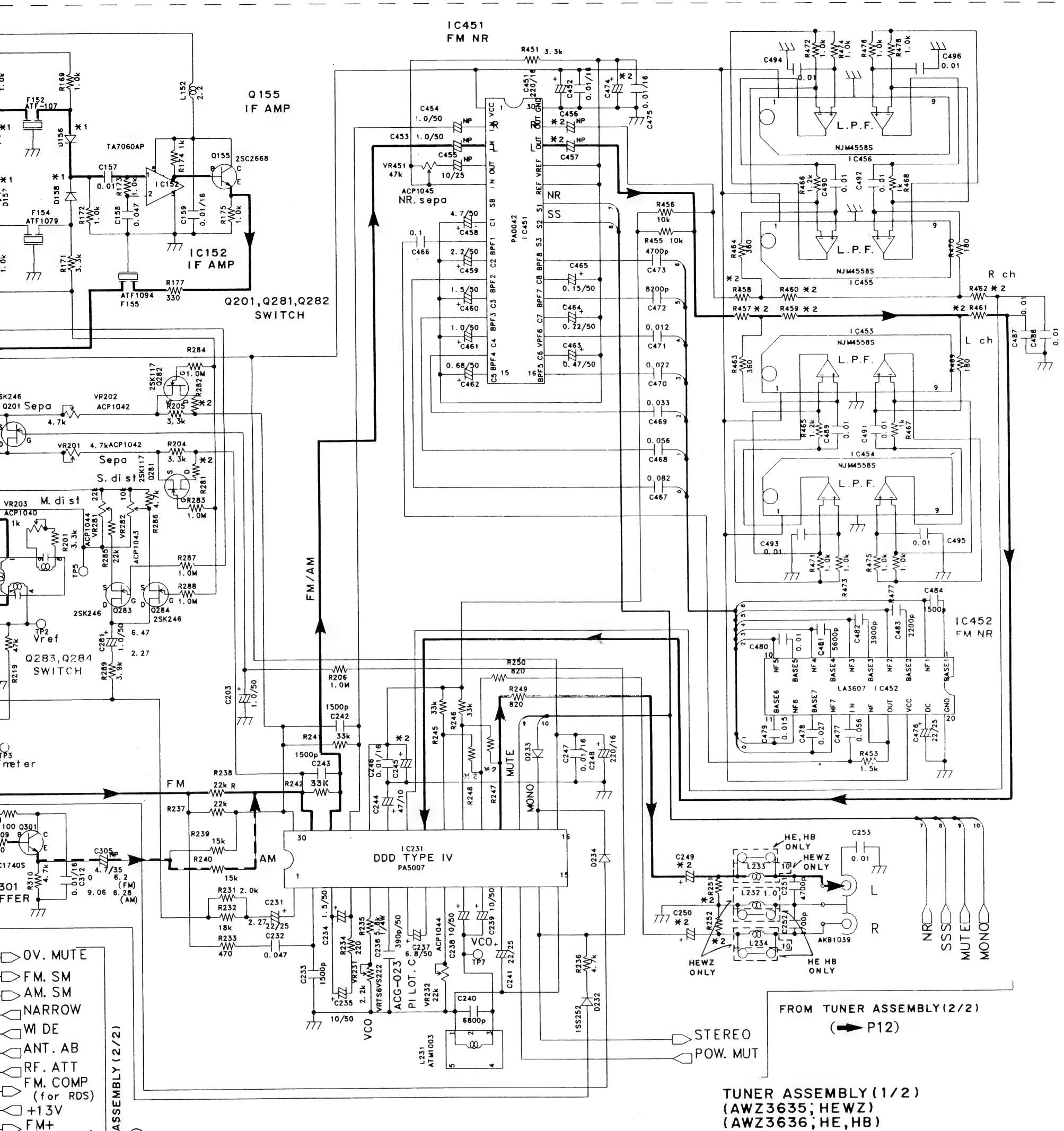
C

D

**IC231 (PA5007)**

IC301 (LA1265S)





- 0V. MUTE
- FM. SM
- AM. SM
- NARROW
- WIDE
- ANT. AB
- RF. ATT
- FM. COMP (for RDS)
- +13V
- FM+ (for RDS)
- +5.6V
- DATA
- CK
- CE
- GND

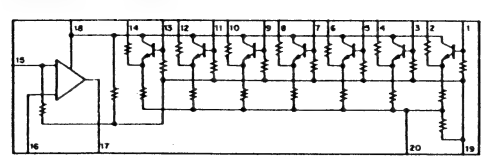
*1

	D151-D158
HE, HB ONLY	1SS252
HEWZ ONLY	1SS85

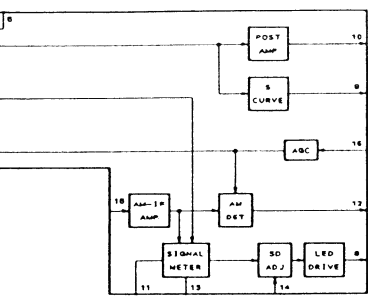
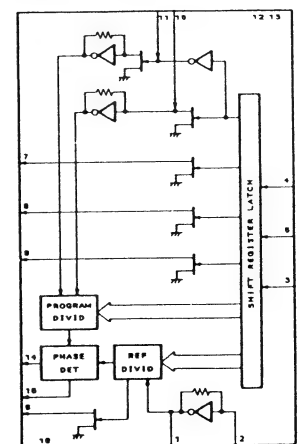
*2

	R251 R252	R281 R282	R287 R288	R457 R458	R459 R460	R461 R462	C245 C474	C249 C250	C456 C457
HE, HB ONLY	1.5K	330 (1/8W)	1K	820 (1/8W)	1.3K (1/8W)	360 (1/8W)	1000 /10	4.7 /50	4.7 /35
HEWZ ONLY	2.2K	330 (1/4W)	12K	820 (1/4W)	1.3K (1/4W)	360 (1/4W)	1000 /16	4.7 /25	4.7 /25

IC452 (LA3607)

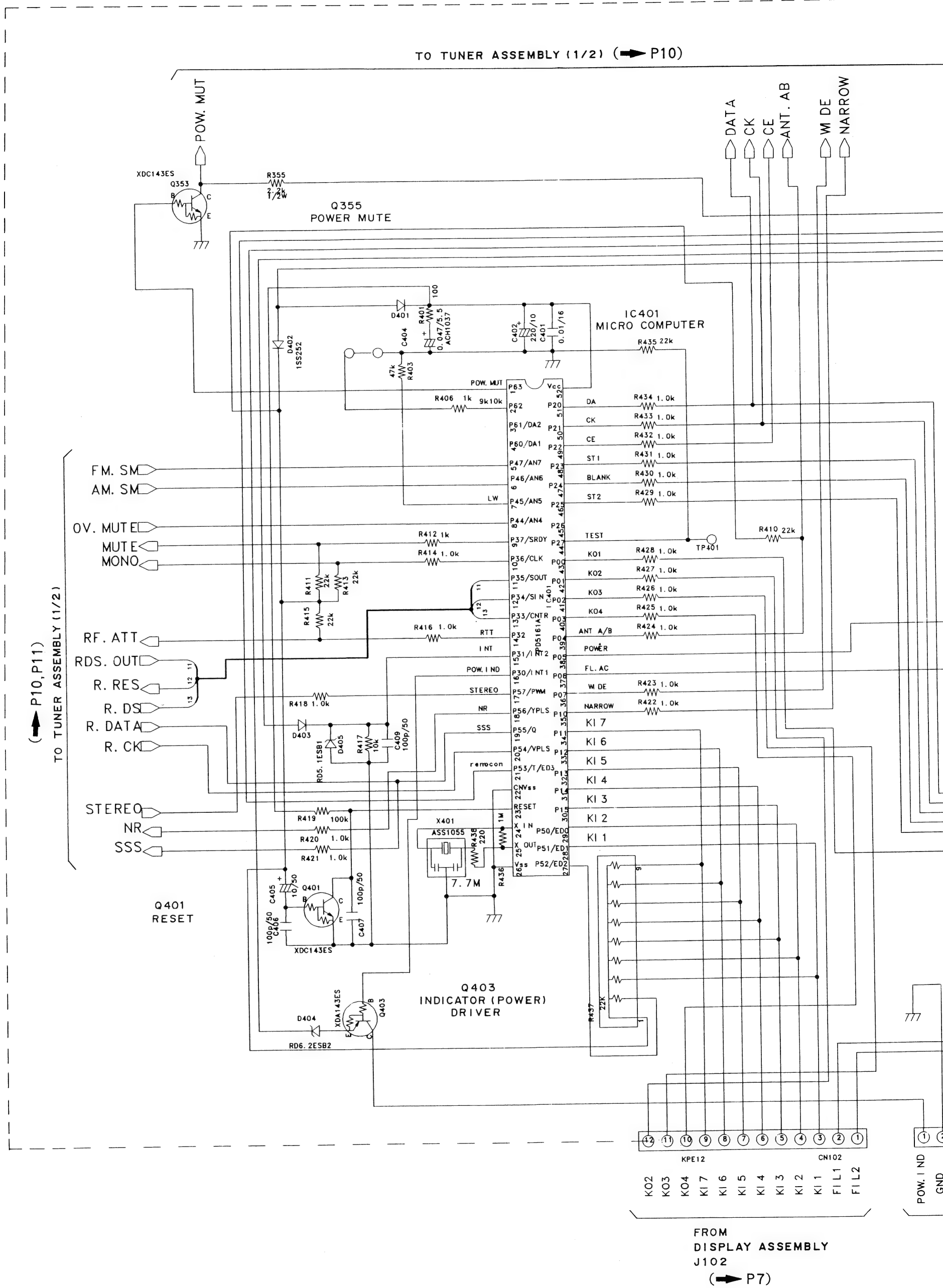


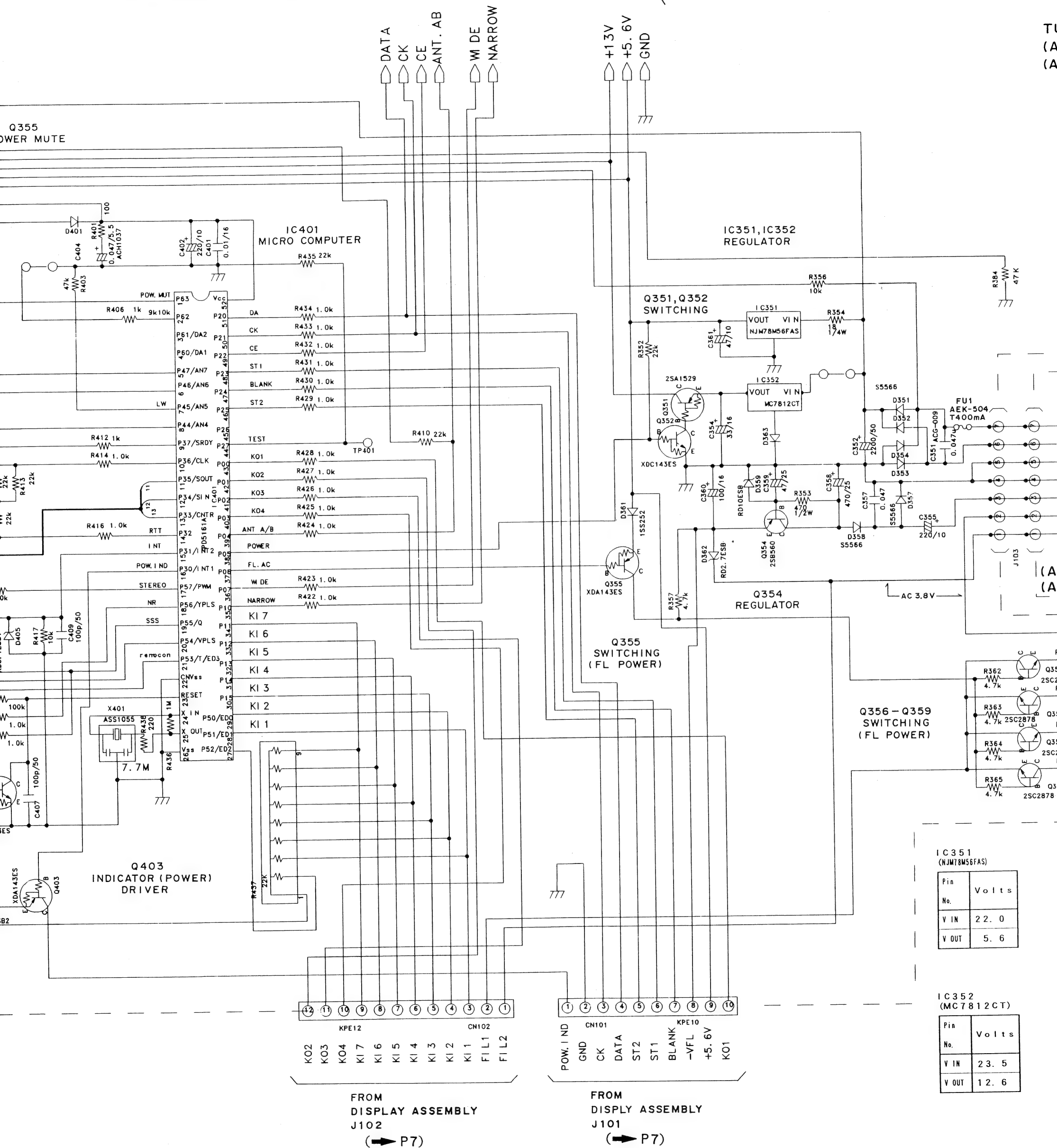
IC321 (LM7001)

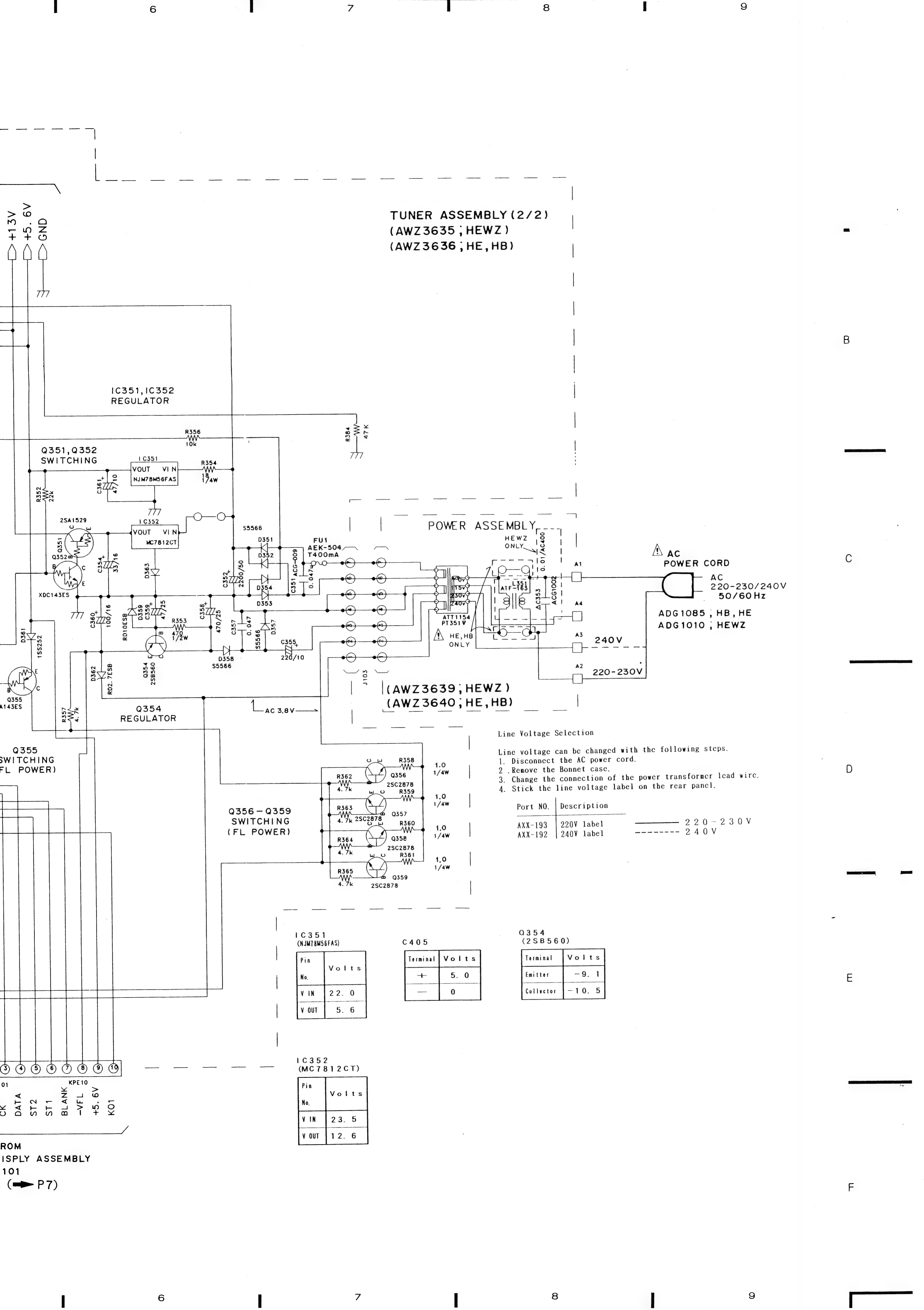


A
B
C
D
E

3.3 TUNER ASSEMBLY (2/2) (AWZ3635) AND POWER ASSEMBLY (AWZ3639)







4. P.C. BOARDS CONNECTION DIAGRAM

NOTE

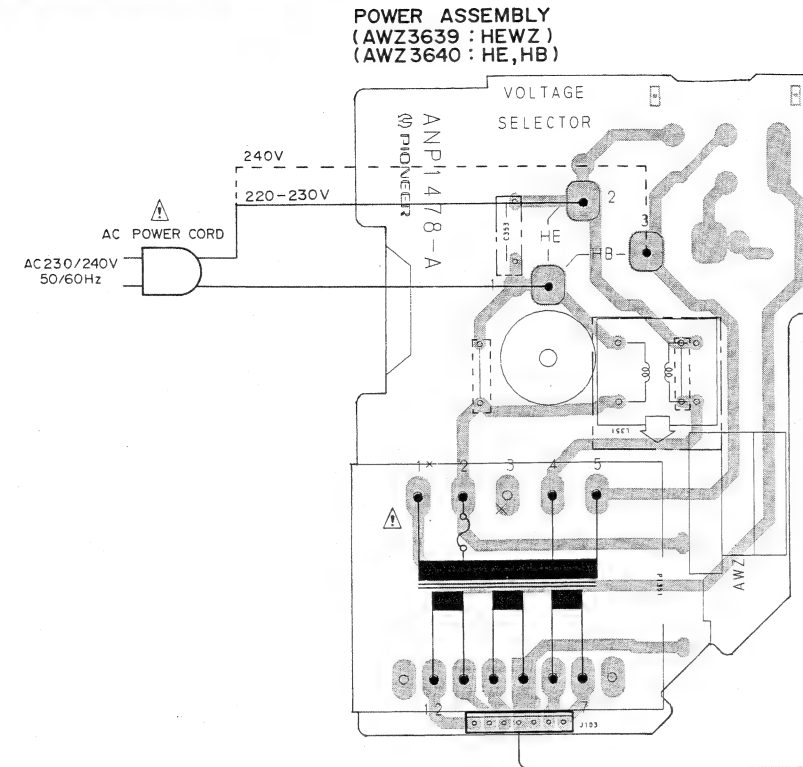
1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

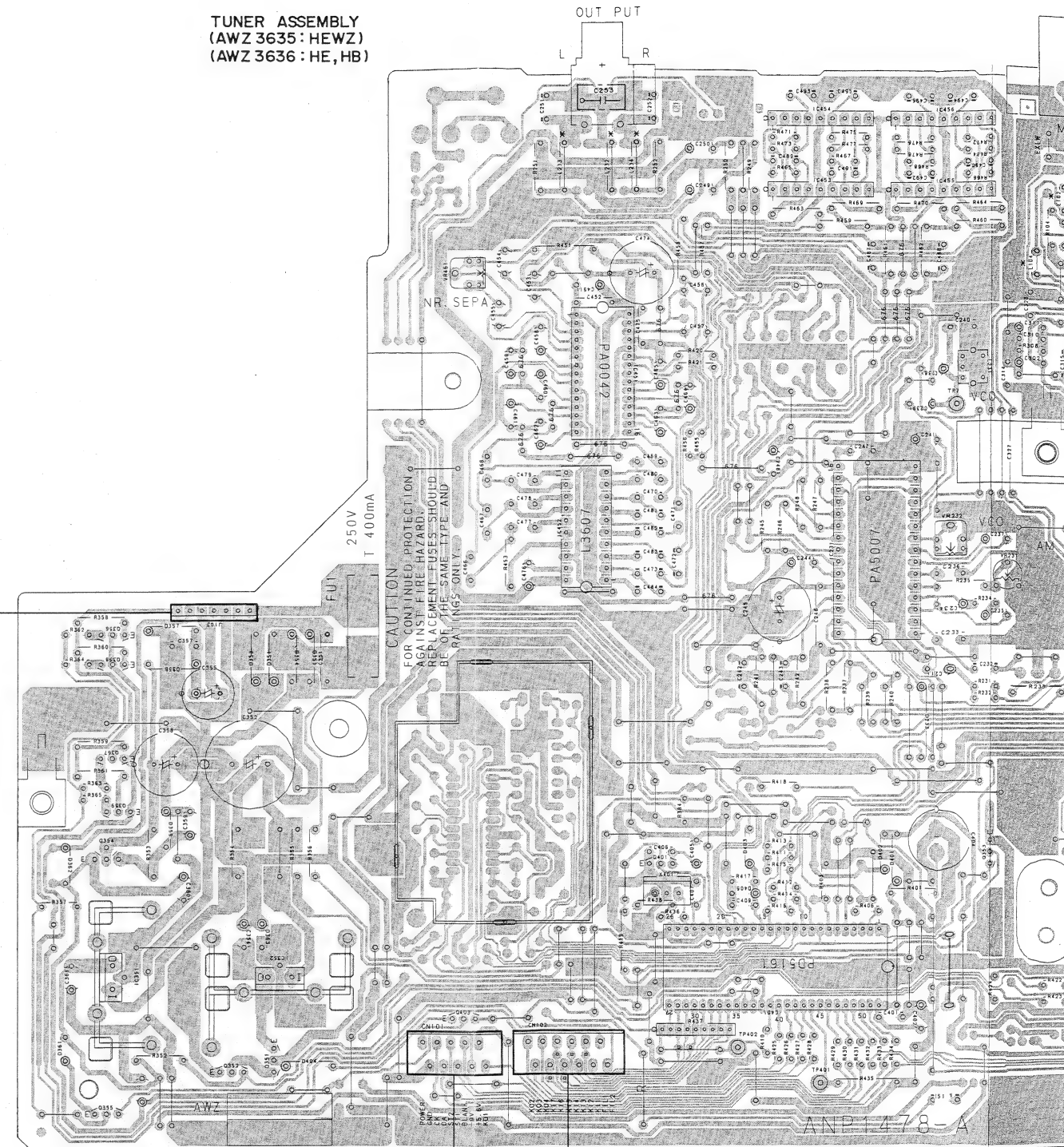
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Fitter
VR	Variable resistor or Semi-fixed resistor

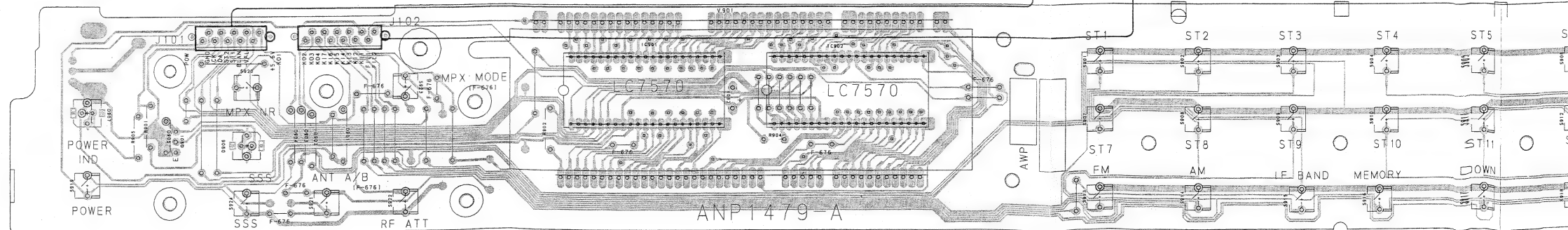
3. The capacitor terminal marked with @ (double circles) shows negative terminal.
4. The diode terminal marked with @ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



TUNER ASSEMBLY
(AWZ3635 : HEWZ)
(AWZ3636 : HE, HB)

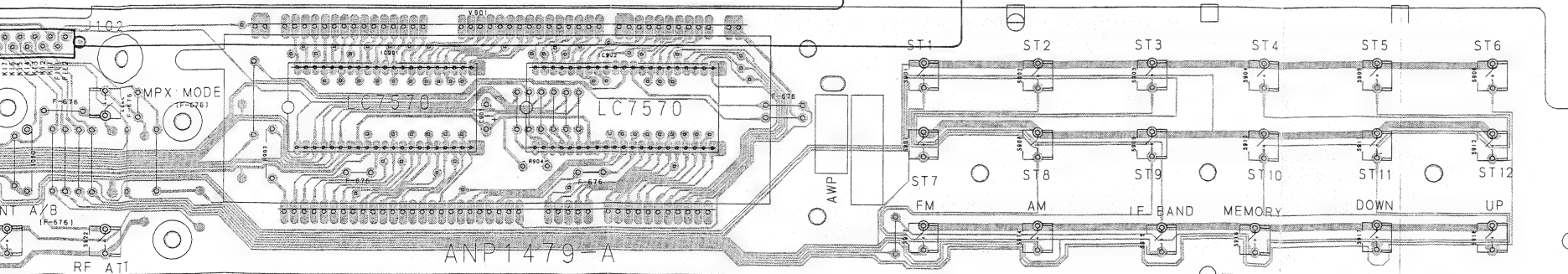
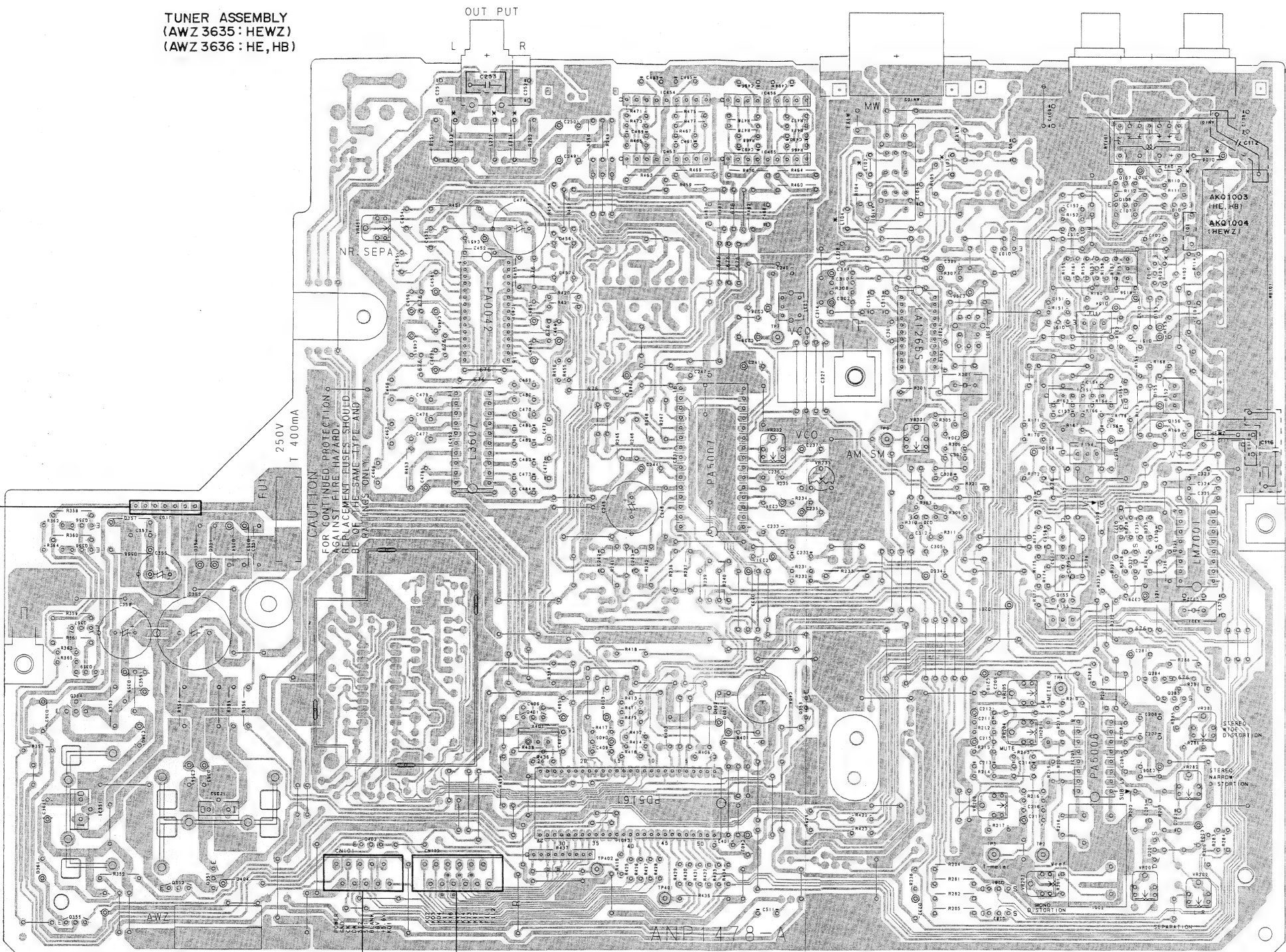
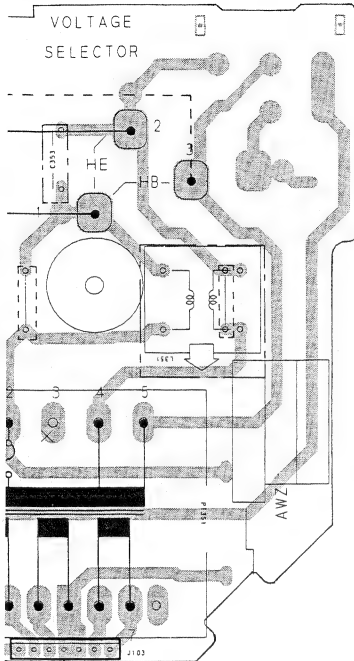


DISPLY ASSEMBLY(AWP 1034)



ASSEMBLY
(HEWZ)
(HE,HB)

TUNER ASSEMBLY
(AWZ 3635 : HEWZ)
(AWZ 3636 : HE, HB)



NOTE
[Solid Line] : HEWZ ONLY
[Dashed Line] : HE,HB ONLY

*	L102	L232	D101	D108	C101	R103
	L103	L233	D103			
	L104	L234	D105			
HE, HB ONLY	JUMPER	JUMPER	UESD	JUMPER	JUMPER	JUMPER
HEWZ ONLY	USED	USED	JUMPER	USED	USED	USED

- IC454 IC456
- IC453 IC455
- Q107
- Q108 Q101
- Q152
- Q103
- Q153
- IC451
- Q151
- IC301
- IC151 Q154
- VR451
- VR301
- VR232
- VR231
- IC452
- IC231
- Q356
- Q358
- Q357
- Q359
- VR205
- VR281
- VR204
- VR282
- VR206
- VR203
- VR201
- VR202
- Q353
- Q401
- Q352
- Q355
- Q322
- IC321
- Q321
- Q284
- Q283
- IC201
- Q201
- Q281
- Q282

A

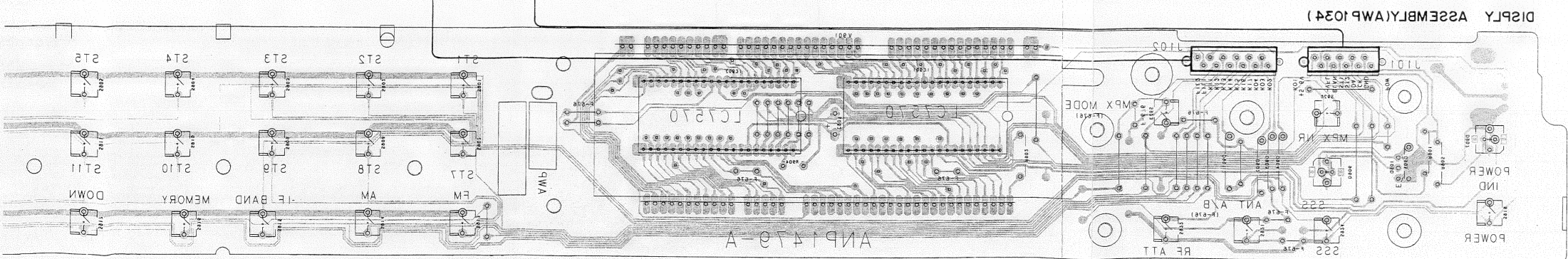
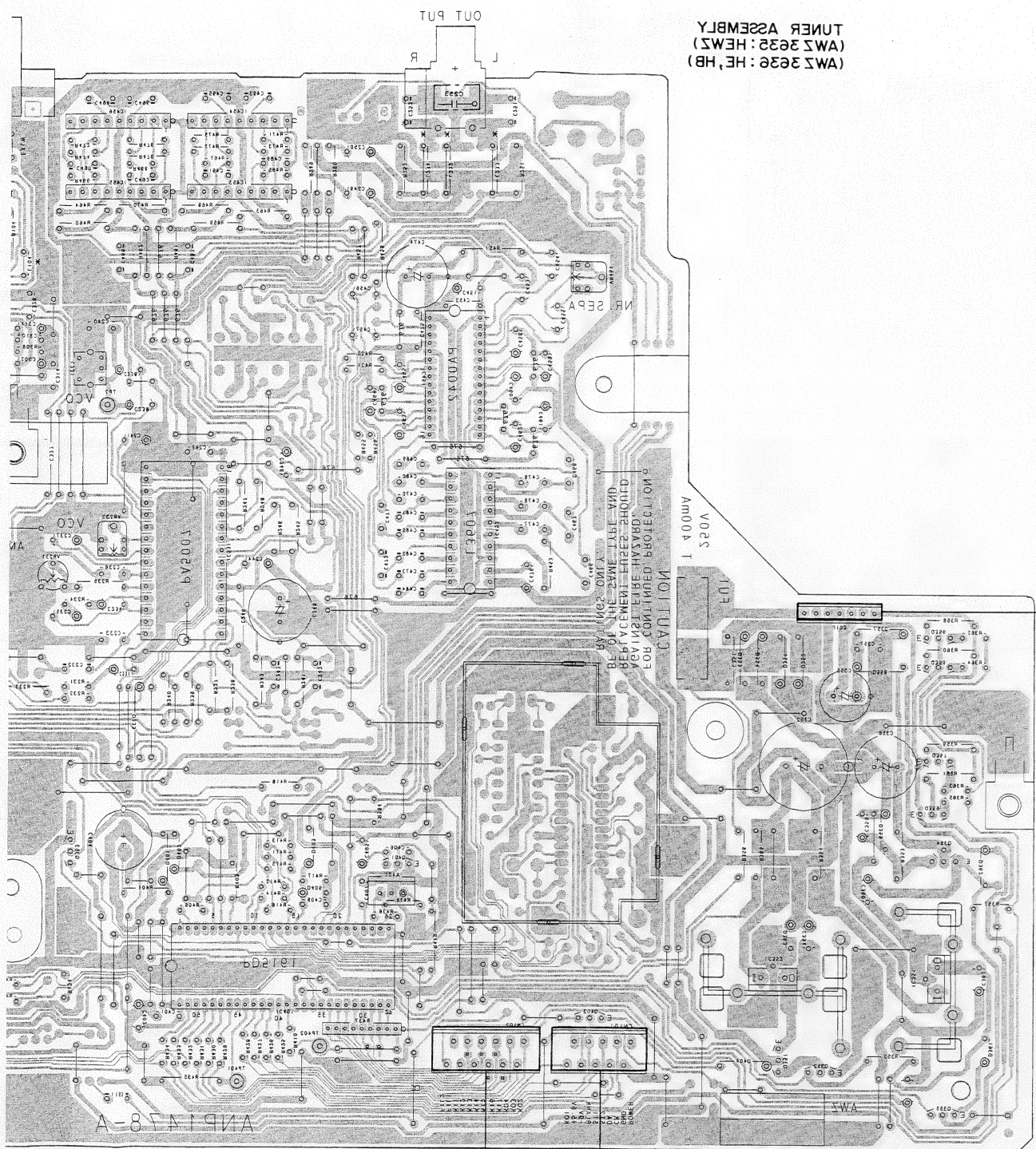
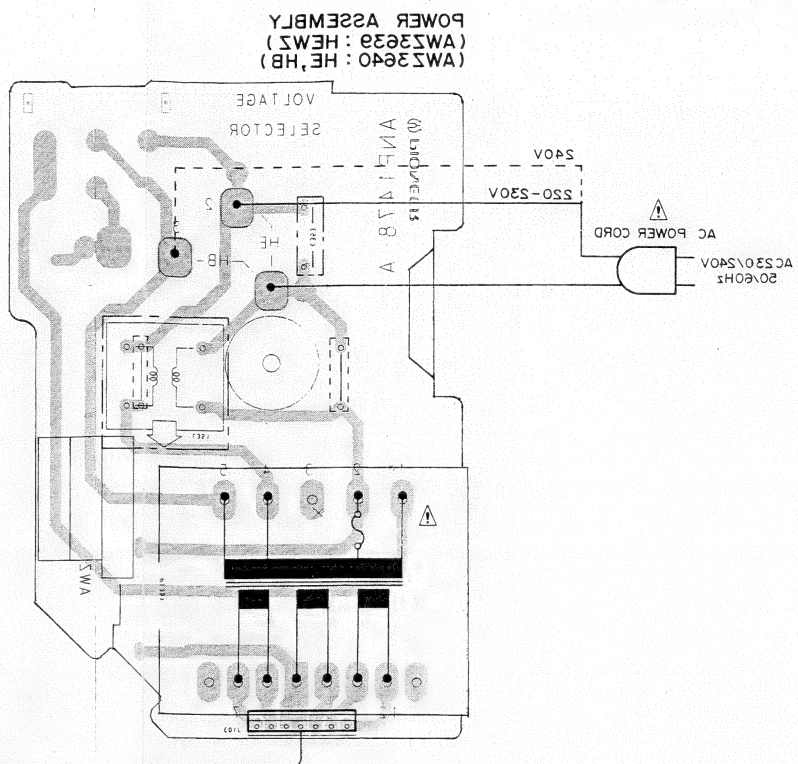
B

C

D

4. P.C. BOARDS CONNECTION DIAGRAM

- View from soldering side



5. P.C.B's PARTS LIST

NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%)

560 Ω \rightarrow 56 $\times 10^1 \rightarrow$ 561 RD1/4PS $\begin{array}{|c|c|c|} \hline 5 & 6 & 1 \\ \hline \end{array}$ J
 47k Ω \rightarrow 47 $\times 10^3 \rightarrow$ 473 RD1/4PS $\begin{array}{|c|c|c|} \hline 4 & 7 & 3 \\ \hline \end{array}$ J
 0.5 Ω \rightarrow 0R5 RN2H $\begin{array}{|c|c|c|} \hline 0 & R & 5 \\ \hline \end{array}$ K
 1 Ω \rightarrow 010 RS1P $\begin{array}{|c|c|c|} \hline 0 & 1 & 0 \\ \hline \end{array}$ K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k $\Omega \rightarrow$ 562 $\times 10^1 \rightarrow$ 5621 RN1/4SR $\begin{array}{|c|c|c|c|} \hline 5 & 6 & 2 & 1 \\ \hline \end{array}$ F

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
⊙ TUNER ASSEMBLY(AWZ3635)							
SEMICONDUCTORS							
	IC151, 152	AMPLIFIER IC	TA7060AP		D232-234	DIODE	1SS252
	IC201	FM IC	PA5008	Δ	D351-354	DIODE	S5566
	IC231	MPX IC	PA5007	Δ	D357, 358	DIODE	S5566
	IC301	AM/FM IC	LA1265S		D359	ZENER DIODE	RD10ESB
	IC321	PLL IC	LM7001		D361	DIODE	1SS252
	IC351	REGULATOR IC	NJM78M56FAS		D362	ZENER DIODE	RD2.7ESB
	IC352	REGULATOR IC	MC7812CT		D363	DIODE	1SS252
	IC401		PD5161A		D401-403	DIODE	1SS252
	IC451	FM-NR	PA0042		D404	ZENER DIODE	RD6.2ESB2
	IC452	GBQ IC	LA3607		D405	ZENER DIODE	RD5.1ESB1
	IC453-456	OP-AMP IC	NJM4558S-X		TH201	THERMISTOR	TH103-2
	Q101	TRANSISTOR	XDA143ES	RELAYS			
	Q102	TRANSISTOR	2SC1740S		RY101	RELAY	ASR-087
	Q103	TRANSISTOR	XDA143ES	COILS/TRANSFORMERS			
	Q107	TRANSISTOR	2SC2705		L101	AXIAL INDUCTOR	LAU2F2M
	Q108	TRANSISTOR	2SC2603		L102-104	AXIAL INDUCTOR	LAU47DK
	Q151, 152	TRANSISTOR	XDA143ES		L152	AXIAL INDUCTOR	LAU2F2M
	Q153-155	TRANSISTOR	2SC2668		L231	COIL	ATM10J3
	Q201	N-FET	2SK246		L232	AXIAL INDUCTOR	LAU0JDM
	Q281, 282	N-FET	2SK117		L233, 234	AXIAL INDUCTOR	LAU10JK
	Q283, 284	N-FET	2SK246		L321	AXIAL INDUCTOR	LAU2F2M
	Q301	TRANSISTOR	2SC1740S		T201	IF TRANSFORMER	ATE-088
	Q321	N-FET	2SK246		F151	CERAMIC FILTER	ATF-109
	Q322	TRANSISTOR	2SC1740SLN		F152	CERAMIC FILTER	ATF-107
	Q351	TRANSISTOR	2SA1529		F153, 154	CERAMIC FILTER	ATF1079
	Q352, 353	TRANSISTOR	XDC143ES		F155	CERAMIC FILTER	ATF1044
	Q354	TRANSISTOR	2SB560		F301	CERAMIC FILTER	ATF1042
	Q355	TRANSISTOR	XDA143ES	CAPACITORS			
	Q356-359	TRANSISTOR	2SC2878		C101	CERAMIC CAPACITOR	CKDYX03M25
	Q401	TRANSISTOR	XDC143ES		C102, 103	CERAMIC CAPACITOR	CKPUY103M16
	Q403	TRANSISTOR	XDA143ES		C104	CERAMIC CAPACITOR	CKDYF73Z50
	D107	DIODE	1SS252		C106	CERAMIC CAPACITOR	CKDYF23Z50
	D108	DIODE	1SV156		C107	CERAMIC CAPACITOR	CKPUY103M16
	D151-158	DIODE	1SS85		C108-110	CERAMIC CAPACITOR	CKDYX03M25
	D201	DIODE	1SS252		C111	CERAMIC CAPACITOR	CKPUY102K50
					C112	CERAMIC CAPACITOR	CKDYX03M25
					C151, 152	CERAMIC CAPACITOR	CKDYF23Z50

Mark	No.	Description	Part No.
	C153	CERAMIC CAPACITOR	CKDYX473M25
	C154	CERAMIC CAPACITOR	CKPUYY103M16
	C156, 157	CERAMIC CAPACITOR	CKDYX103M25
	C158	CERAMIC CAPACITOR	CKDYX473M25
	C159	CERAMIC CAPACITOR	CKPUYY103M16
	C201	CERAMIC CAPACITOR	CCMCH150J50
	C202	CERAMIC CAPACITOR	CCMCH330J50
	C203	ELECTR. CAPACITOR	CEAS010M50
	C205	CERAMIC CAPACITOR	CKPUYY103M16
	C206	ELECTR. CAPACITOR	CEEA101M16
	C207, 208	CERAMIC CAPACITOR	CKDYX473M25
	C209	CERAMIC CAPACITOR	CKPUYY103M16
	C210	ELECTR. CAPACITOR	CEAS010M50
	C211	CERAMIC CAPACITOR	CKPUYY103M16
	C212	ELECTR. CAPACITOR	CEAS010M50
	C213, 214	CERAMIC CAPACITOR	CKMYB181K50
	C215	ELECTR. CAPACITOR	CEAS3R3M50
	C216	CERAMIC CAPACITOR	CKPUYY103M16
	C217	ELECTR. CAPACITOR	CEEA101M16
	C231	ELECTR. CAPACITOR	CEAS220M25
	C232	AUDIO FILM CAPACITOR	CFTXA473J50
	C233	CERAMIC CAPACITOR	CKDYB152K50
	C234	ELECTR. CAPACITOR	CEAS1R5M50
	C235	ELECTR. CAPACITOR	CEAS100M50
	C236	CKA (390P/50V)	ACG-023
	C237	ELECTR. CAPACITOR	CEAS6R8M50
	C238, 239	ELECTR. CAPACITOR	CEAS100M50
	C240	PL. STYRENE CAPACITOR	CQSA682J50
	C241	ELECTR. CAPACITOR	CEAS220M25
	C242, 243	MYLOR FILM CAPACITOR	CQMA152J50
	C244	ELECTR. CAPACITOR	CEAS470M10
	C245	ELECTR. CAPACITOR	CEEA102M16
	C246, 247	CERAMIC CAPACITOR	CKPUYY103M16
	C248	ELECTR. CAPACITOR	CEEA221M16
	C249, 250	ELECTR. CAPACITOR	CEEA4R7M25
	C251, 252	CERAMIC CAPACITOR	CKDYB472K50
	C253	CERAMIC CAPACITOR	CKDYX103M25
	C281	ELECTR. CAPACITOR	CEAS010M50
	C301	CERAMIC CAPACITOR	CKPUYY103M16
	C302	ELECTR. CAPACITOR	CEAS330M16
	C304	ELECTR. CAPACITOR	CEAS100M50
	C305	ELECTR. CAPACITOR	CEANP4R7M35
	C306	ELECTR. CAPACITOR	CEAS4R7M50
	C307	CERAMIC CAPACITOR	CKDYB222K50
	C308	CERAMIC CAPACITOR	CKDYX473M25
	C309	CERAMIC CAPACITOR	CKDYF223Z50
	C310	CERAMIC CAPACITOR	CKPUYY103M16
	C311	ELECTR. CAPACITOR	CEAS470M10
	C312	CERAMIC CAPACITOR	CKPUYY103M16
	C313	CERAMIC CAPACITOR	CKDYF223Z50
	C314	CERAMIC CAPACITOR	CKPUYY103M16
	C315	CERAMIC CAPACITOR	CKDYF223Z50
	C321, 322	CERAMIC CAPACITOR	CCMCH150J50
	C323-325	AXIAL CERAMIC C.	CCPUSL470J50

Mark	No.	Description	Part No.
	C326, 327	CERAMIC CAPACITOR	CKPUYY103M16
	C328	AXIAL CERAMIC C.	CCPUSL470J50
	C329	ELECTR. CAPACITOR	CEAS330M16
	C330	AUDIO FILM CAPACITOR	CFTXA224J50
	C331	CERAMIC CAPACITOR	CKPUYY103M16
	C351	CAPACITOR (CERAMIC)	ACG-009
	C352	ELECTR. CAPACITOR	CEAS222M50
	C354	ELECTR. CAPACITOR	CEAS330M16
	C355	ELECTR. CAPACITOR	CEAS221M10
	C357	CERAMIC CAPACITOR	CKDYF473Z50
	C358	ELECTR. CAPACITOR	CEAS471M25
	C359	ELECTR. CAPACITOR	CEAS470M25
	C360	ELECTR. CAPACITOR	CEAS101M16
	C361	ELECTR. CAPACITOR	CEAS470M10
	C401	CERAMIC CAPACITOR	CKPUYY103M16
	C402	ELECTR. CAPACITOR	CEAS221M10
	C404	CEA (47000/5. 5V)	ACH1037
	C405	ELECTR. CAPACITOR	CEAS100M50
	C406, 407	CERAMIC CAPACITOR	CKPUYB101K50
	C409	CERAMIC CAPACITOR	CKPUYB101K50
	C451	ELECTR. CAPACITOR	CEEA221M16
	C452	CERAMIC CAPACITOR	CKPUYY103M16
	C453, 454	ELECTR. CAPACITOR	CEEANP010M50
	C455	ELECTR. CAPACITOR	CEANP100M25
	C456, 457	ELECTR. CAPACITOR	CEEANP4R7M25
	C458	ELECTR. CAPACITOR	CEAS4R7M50
	C459	ELECTR. CAPACITOR	CEAS2R2M50
	C460	ELECTR. CAPACITOR	CEAS1R5M50
	C461	ELECTR. CAPACITOR	CEAS010M50
	C462	ELECTR. CAPACITOR	CEASR68M50
	C463	ELECTR. CAPACITOR	CEASR47M50
	C464	ELECTR. CAPACITOR	CEASR22M50
	C465	ELECTR. CAPACITOR	CEASR15M50
	C466	CERAMIC CAPACITOR	CKDYX104M25
	C467	CERAMIC CAPACITOR	CKDYX823M25
	C468	CERAMIC CAPACITOR	CKDYX563M25
	C469	CERAMIC CAPACITOR	CKDYX333M25
	C470	CERAMIC CAPACITOR	CKDYX223M25
	C471	CERAMIC CAPACITOR	CKDYX123M25
	C472	CERAMIC CAPACITOR	CKDYB822K50
	C473	CERAMIC CAPACITOR	CKDYB472K50
	C474	ELECTR. CAPACITOR	CEEA102M16
	C475	CERAMIC CAPACITOR	CKPUYY103M16
	C476	ELECTR. CAPACITOR	CEAS220M25
	C477	CERAMIC CAPACITOR	CKDYX563M25
	C478	CERAMIC CAPACITOR	CKDYX273M25
	C479	CERAMIC CAPACITOR	CKDYX153M25
	C480	CERAMIC CAPACITOR	CKDYX103M25
	C481	CERAMIC CAPACITOR	CKDYB562K50
	C482	CERAMIC CAPACITOR	CKDYB392K50
	C483	CERAMIC CAPACITOR	CKDYB222K50
	C484	CERAMIC CAPACITOR	CKDYB152K50
	C487-496	MYLOR FILM CAPACITOR	CQMA103J50

Mark	No.	Description	Part No.
RESISTORS			
	R101	CARBONFILM RESISTOR	RD1/8PM□□□J
	R102	CARBONFILM RESISTOR	RD1/2PM□□□J
	R103-105	CARBONFILM RESISTOR	RD1/8PM□□□J
	R110-113	CARBONFILM RESISTOR	RD1/8PM□□□J
	R151-164	CARBONFILM RESISTOR	RD1/8PM□□□J
	R166-175	CARBONFILM RESISTOR	RD1/8PM□□□J
	R177, 178	CARBONFILM RESISTOR	RD1/8PM□□□J
	R201	CARBONFILM RESISTOR	RD1/8PM□□□J
	R202-205	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R206-219	CARBONFILM RESISTOR	RD1/8PM□□□J
	R231-234	CARBONFILM RESISTOR	RD1/8PM□□□J
	R235	METALFILM RESISTOR	RN1/4PQ□□□□F
	R236	CARBONFILM RESISTOR	RD1/8PM□□□J
	R237, 238	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R239, 240	CARBONFILM RESISTOR	RD1/8PM□□□J
	R241, 242	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R245-252	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R281, 282	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R283-289	CARBONFILM RESISTOR	RD1/8PM□□□J
	R301	CARBONFILM RESISTOR	RD1/8PM□□□J
	R303-307	CARBONFILM RESISTOR	RD1/8PM□□□J
	R309-311	CARBONFILM RESISTOR	RD1/8PM□□□J
	R321-329	CARBONFILM RESISTOR	RD1/8PM□□□J
	R352	CARBONFILM RESISTOR	RD1/8PM□□□J
	R353	CARBONFILM RESISTOR	RD1/2PM□□□J
△	R354	FUSIBLE RESISTOR	RFA1/4PS□□□J
	R355	CARBONFILM RESISTOR	RD1/2PM□□□J
	R356, 357	CARBONFILM RESISTOR	RD1/8PM□□□J
	R358-361	CARBONFILM RESISTOR	RD1/4PM□□□J
	R362-365	CARBONFILM RESISTOR	RD1/8PM□□□J
	R384	CARBONFILM RESISTOR	RD1/8PM□□□J
	R401	CARBONFILM RESISTOR	RD1/8PM□□□J
	R403	CARBONFILM RESISTOR	RD1/8PM□□□J
	R406	CARBONFILM RESISTOR	RD1/8PM□□□J
	R410-436	CARBONFILM RESISTOR	RD1/8PM□□□J
	R437	RESISTOR ARRAY(22K)	RA8T□□□J
	R438	CARBONFILM RESISTOR	RD1/8PM□□□J
	R451	CARBONFILM RESISTOR	RD1/8PM□□□J
	R453	CARBONFILM RESISTOR	RD1/8PM□□□J
	R455, 456	CARBONFILM RESISTOR	RD1/8PM□□□J
	R457-462	CARBONFILM RESISTOR	RDR1/4PM□□□J
	R463-478	CARBONFILM RESISTOR	RD1/8PM□□□J
	VR201, 202	VR	ACP1042
	VR203	VR	ACP1040
	VR204	VR	ACP1043
	VR205	VR	ACP1046
	VR206	VR	ACP1038
	VR231	VR	VRTS6VS222
	VR232	VR	ACP1044
	VR281	VR	ACP1044
	VR282	VR	ACP1043
	VR301	VR	ACP1043
	VR451	VR	ACP1045

Mark	No.	Description	Part No.
OTHERS			
		SCREW	ABA-298
		PIN JACK(2P)	AKB1039
		TERMINAL 2-P	AKE-060
		SOCKET	AKX1034
		FRONT END MODULE ASSEMBLY	AXQ1004
		AM RF TUNING BLOCK	AXX1011
		CN101 CONNECTOR(10P)	KPE10
		CN102 CONNECTOR(12P)	KPE12
		X301 CERAMIC RESONATOR	ATF1027
		X321 CRYSTAL RESONATOR	ASS1005

X401 CERAMIC RESONATOR ASS1055

◎ POWER ASSEMBLY(AWZ3639)

COILS/TRANSFORMERS

△	L351	FILTER	ATF-163
△	T351	POWER TRANSFORMER	ATT1154

CAPACITORS

△	C353	CKA (0.01/AC400V)	ACG1002
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DISPLAY ASSEMBLY (AWP1034)

SEMICONDUCTORS

IC901, 902	FL STATIC DRIVER IC	LC7570
Q901	TRANSISTOR	DTC143ES
D901-905	DIODE	1SS252
D906, 907	LED	AEL1072

SWITCHES

S901-924	SWITCH	ASG1034
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CAPACITORS

C901	CERAMIC CAPACITOR	CKPUY103M16
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RESISTORS

R901, 902	CARBONFILM RESISTOR	RD1/8PM□□□J
R905	CARBONFILM RESISTOR	RD1/8PM□□□J

OTHERS

V901	FL TUBE	AAV1095
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FRONT END MODULE ASSEMBLY (AXQ1004)

The component parts of Front End Module assembly (AXQ1004) cannot be supplied.

6. ADJUSTMENTS

6.1 FM TUNER ADJUSTMENTS

- Connect as shown in Fig. 6-1.

6.1.1 FM MONO

Step	Adjustment name	FM SG (1 kHz \pm 75 kHz dev.)			FL display, IF BAND etc.	Location	Adjustment
		Frequency	Modulation	Level			
1	T meter adjustment	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-B	Adjust so that the voltage between TP2 and TP3 becomes 0 ± 100 mV.
2	MONO distortion adjustment	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-A VR203	Adjust so that the distortion becomes minimum.
3	Sub-balance adjustment	98 MHz	MONO	60 dB μ	98 MHz NORMAL	VR208	Adjust so that the AC voltage at IC201 pin 2 becomes minimum.

6.1.2 FM STEREO

Step	Adjustment name	FM SG (1 kHz \pm 75 kHz dev.)			FL display, IF BAND etc.	Location	Adjustment
		Frequency	Modulation	Level			
1	VCO adjustment	108 MHz	OFF	60 dB μ	108 MHz	VR231	Adjust so that the output at TP7 becomes $38 \text{ kHz} \pm 100 \text{ Hz}$.
2	Pilot cancel	107 MHz	PILOT ONLY	60 dB μ	107 MHz NORMAL	VR232	Adjust so that the AC voltage at output terminal becomes minimum. (MAX LPF: OFF)
3	STEREO distortion adjustment (NORMAL)	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL	VR281	Adjust so that the distortion becomes minimum.
4	STEREO distortion adjustment (SUPER NARROW)	89 MHz	L-ONLY	60 dB μ	89 MHz SUPER NARROW	VR282	Adjust so that the distortion becomes minimum.
5	Separation adjustment	89 MHz	R-ONLY	60 dB μ	89 MHz NORMAL	VR202	Adjust so that the separation R \rightarrow L becomes maximum.
6			L-ONLY	60 dB μ	89 MHz NORMAL	VR201	Adjust so that the separation L \rightarrow R becomes maximum.
7	Noise reduction adjustment	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL MPX NR: ON/OFF	VR451	Adjust so that the output level, when ON, becomes $+1^{+0.5}_{-0.1}$ dB when the MPX NR of the main unit is OFF.

Stereo modulation: Main 1 kHz L+R \pm 68.25 Hz, Pilot 19 kHz \pm 6.75 kHz.

6.1.3 FM ETC

Step	Adjustment name	FM SG (1 kHz \pm 75 kHz dev.)			FL display, IF BAND etc.	Location	Adjustment
		Frequency	Modulation	Level			
1	S meter adjustment	99 MHz	MONO	75 dB μ	99 MHz NORMAL	VR205	Adjust so that the voltage between TP4 and GND becomes $4.9^{+0.05}_{-0.1}$ V.
2	Muting level adjustment	99 MHz	MONO	12 dB μ	99 MHz NORMAL	VR204	Adjust so that the muting is released at the input level shown on the left.

6.2 AM TUNER ADJUSTMENTS

- Connect as shown in Fig. 6-2.

Step	Adjustment name	FM SG (400 Hz 30% modulation)			FL display, IF BAND etc.	Location	Adjustment
		Frequency	Modulation	Level			
1	Tracking adjustment * 1	603 kHz	OFF	Low input level	603 kHz	ANT coil of MW block	Adjust so that the voltage between TP9 and GND becomes maximum.
		1395 kHz	OFF	Low input level	1395 kHz	TC101	
2	IFT adjustment * 1	603 kHz	OFF	Low input level	603 kHz	F301	
3	S meter adjustment	1008 kHz	ON	74 dB μ V/m	1008 kHz	VR301	Adjust so that the voltage between TP9 and GND becomes 2.5 ± 0.05 V.

*1: Adjustment only for HIX1B.

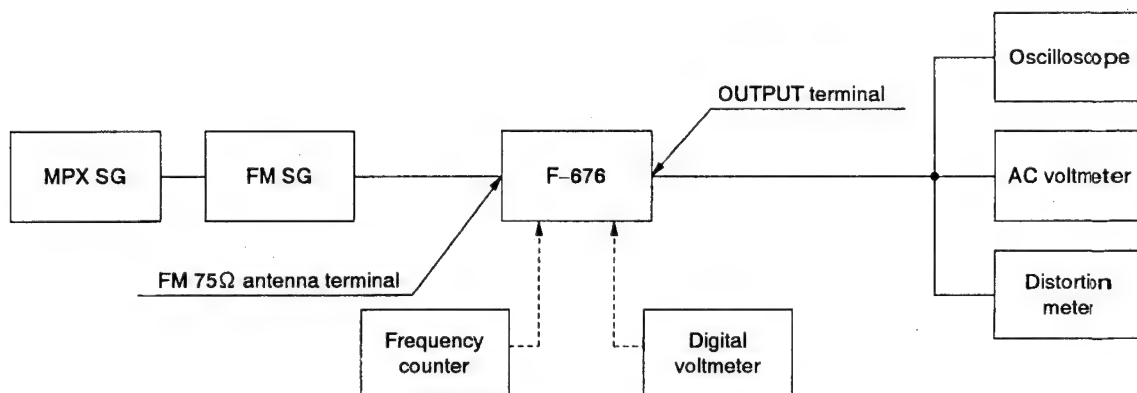


Fig. 6-1 FM Tuner Connection

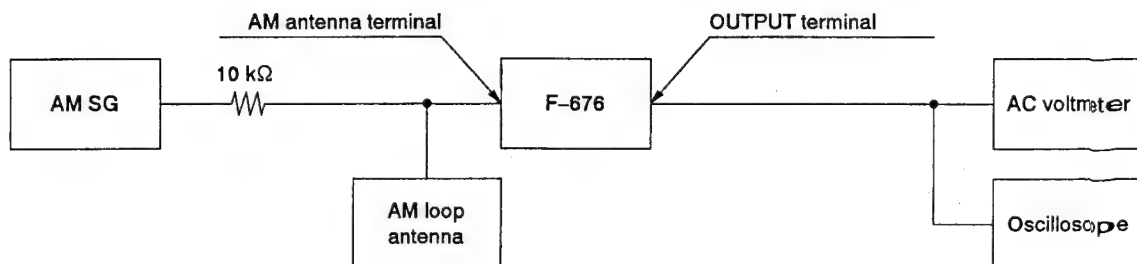


Fig. 6-2 AM Tuner Connection

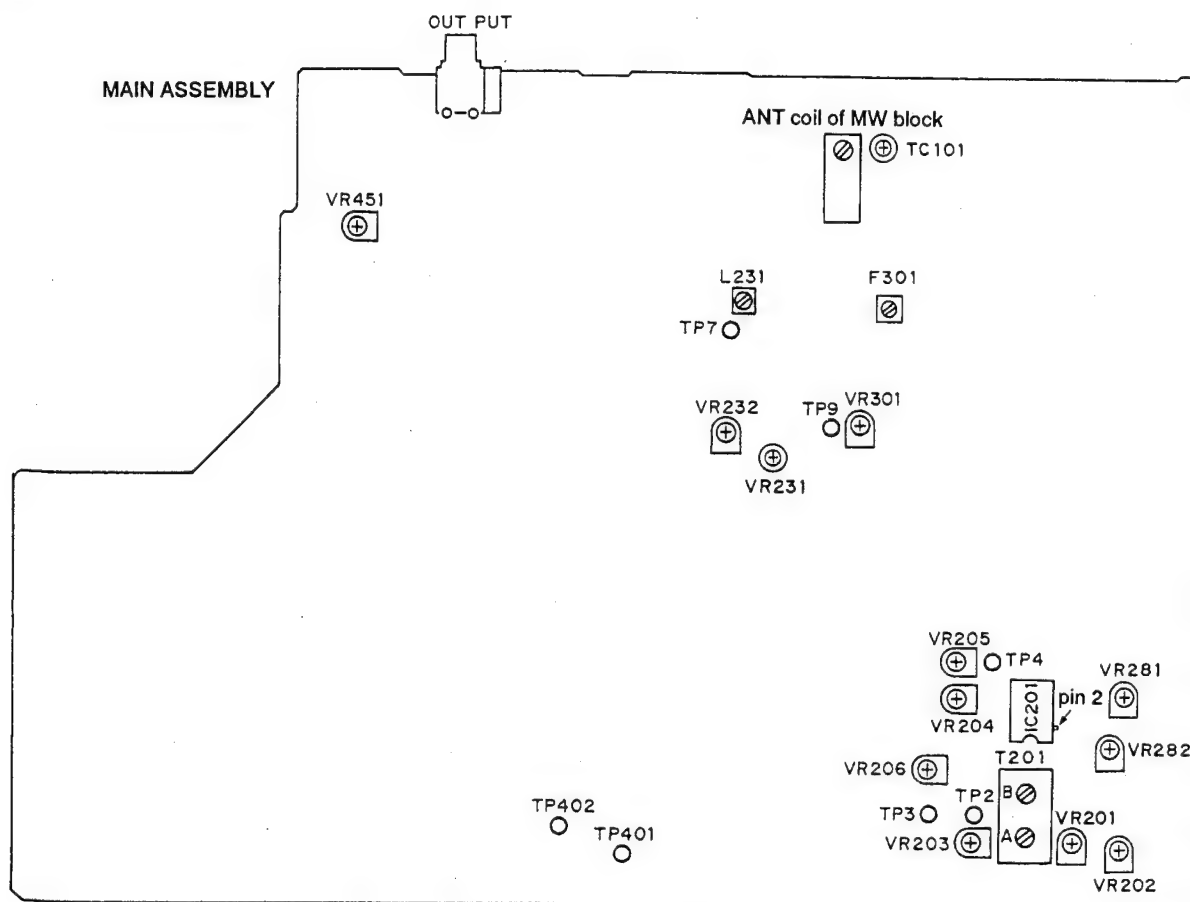


Fig. 6-3 Adjusting Point

6. RÉGLAGES

6.1 RÉGLAGES DU SYNTONISEUR FM

- Raccorder comme indiqué à la figure 6-1.

6.1.1 MONO FM

Etape	Nom du réglage	FM SG (1 kHz \pm 75 kHz dev.)			Affichage FL, GAMME FI, etc.	Emplacement	Réglage
		Fréquence	Modulation	Niveau			
1	Appareil de mesure en T	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-B	Régler afin que la tension entre TP2 et TP3 soit de 0 \pm 100 mV.
2	Réglage de distorsion MONO	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-A VR203	Régler afin que la distorsion soit minimale.
3	Réglage de l'équilibre auxiliaire	98 MHz	MONO	60 dB μ	98 MHz NORMAL	VR208	Régler afin que la tension CA à IC201 Broche 2 soit minimale.

6.1.2 STEREO FM

Etape	Nom du réglage	FM SG (1 kHz \pm 75 kHz dev.)			Affichage FL, GAMME FI, etc.	Emplacement	Réglage
		Fréquence	Modulation	Niveau			
1	Réglage du VCO	108 MHz	OFF	60 dB μ	108 MHz	VR231	Régler afin que la sortie à TP7 soit de 38 kHz \pm 100 Hz
2	Neutralisation pilote	107 MHz	PILOT ONLY	60 dB μ	107 MHz NORMAL	VR232	Régler afin que la tension CA, broches de sortie, soit minimale. (MAX LPF: HORS CIRCUIT)
3	Réglage de distorsion STEREO (NORMAL)	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL	VR281	Régler afin que la distorsion soit minimale.
4	Réglage de distorsion STEREO (SUPER NARROW)	89 MHz	L-ONLY	60 dB μ	89 MHz SUPER NARROW	VR282	Régler afin que la distorsion soit minimale.
5	Réglage de séparation	89 MHz	R-ONLY	60 dB μ	89 MHz NORMAL	VR202	Régler afin que la séparation D \rightarrow G soit maximale.
6			L-ONLY	60 dB μ	89 MHz NORMAL	VR201	Régler afin que la séparation G \rightarrow D soit maximale.
7	Réglage de réduction de bruit	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL MPX NR: ON/OFF	VR451	Régler afin que le niveau de sortie, quand ON, soit de +1 $^{+0,5}_{-0,1}$ dB lorsque le MPX NR de l'unité principale est hors-circuit.

Modulation de stéréo: Principal 1 kHz L+R \pm 68,25 Hz, Pilote 19 kHz \pm 6,75 kHz.

6.1.3 ETC FM

Etape	Nom du réglage	FM SG (1 kHz \pm 75 kHz dev.)			Affichage FL, GAMME FI, etc.	Emplacement	Réglage
		Fréquence	Modulation	Niveau			
1	Appareil de mesure en S	99 MHz	MONO	75 dB μ	99 MHz NORMAL	VR205	Régler afin que la tension entre TP4 en GND soit 4,9 $^{+0,05}_{-0,1}$ V.
2	Réglage de niveau de sourdine	99 MHz	MONO	12 dB μ	99 MHz NORMAL	VR204	Régler afin que la sourdine soit relâchée au niveau d'entrée indiqués sur la gauche.

6.2 RÉGLAGES DU SYNTONISEUR AM

- Raccorder comme indiqué à la figure 6-2.

Etape	Nom du réglage	FM SG (400 Hz 30% modulation)			Affichage FL, GAMME FI, etc.	Emplacement	
		Réglage	Fréquence	Modulation		Niveau	
1	Réglage d'alignement * 1	603 kHz	OFF	Niveau bas d'entrée	603 kHz	Bobine ANT du bloc OM	Régler afin que la tension entre TP9 et GND soit maximale.
		1395 kHz	OFF	Niveau bas d'entrée	1395 kHz	TC101	
2	Réglage du transformateur de FI * 1	603 kHz	OFF	Niveau bas d'entrée	603 kHz	F301	
3	Appareil de mesure en S	1008 kHz	ON	74 dB μ V/m	1008 kHz	VR301	Régler afin que la tension entre TP9 et GND soit $2,5 \pm 0,05$ V.

* 1: Réglage pour HIX1B seulement.

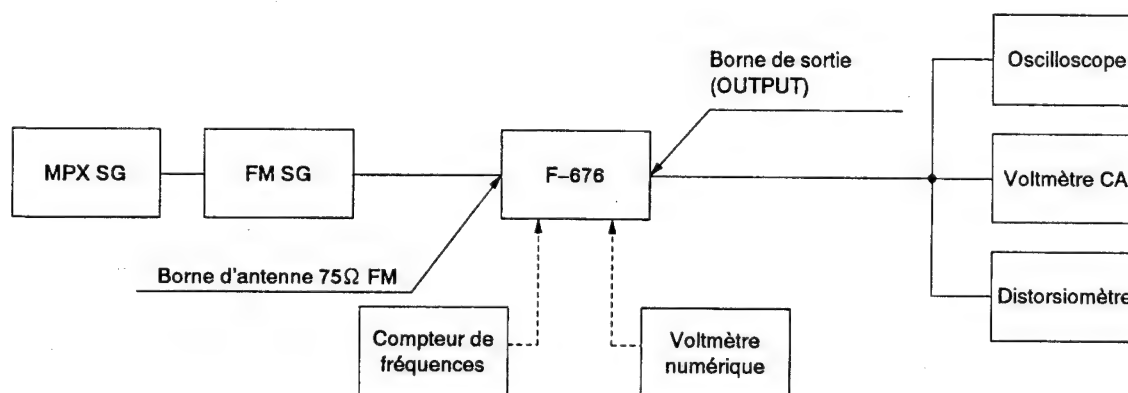


Fig. 6-1 Branchement du syntoniseur FM

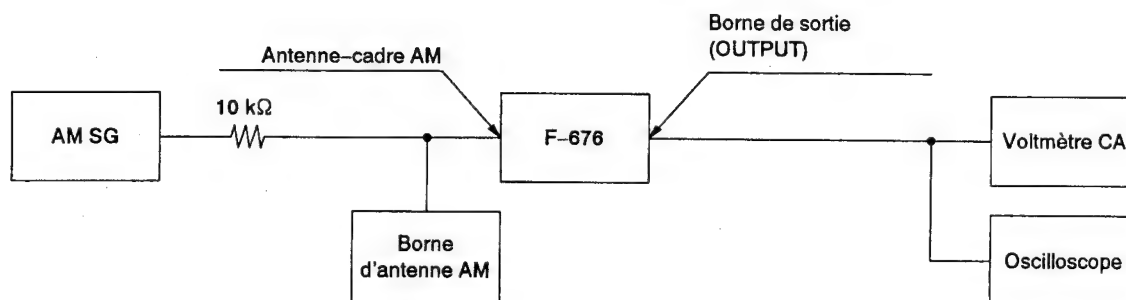


Fig. 6-2 Branchement du syntoniseur FM

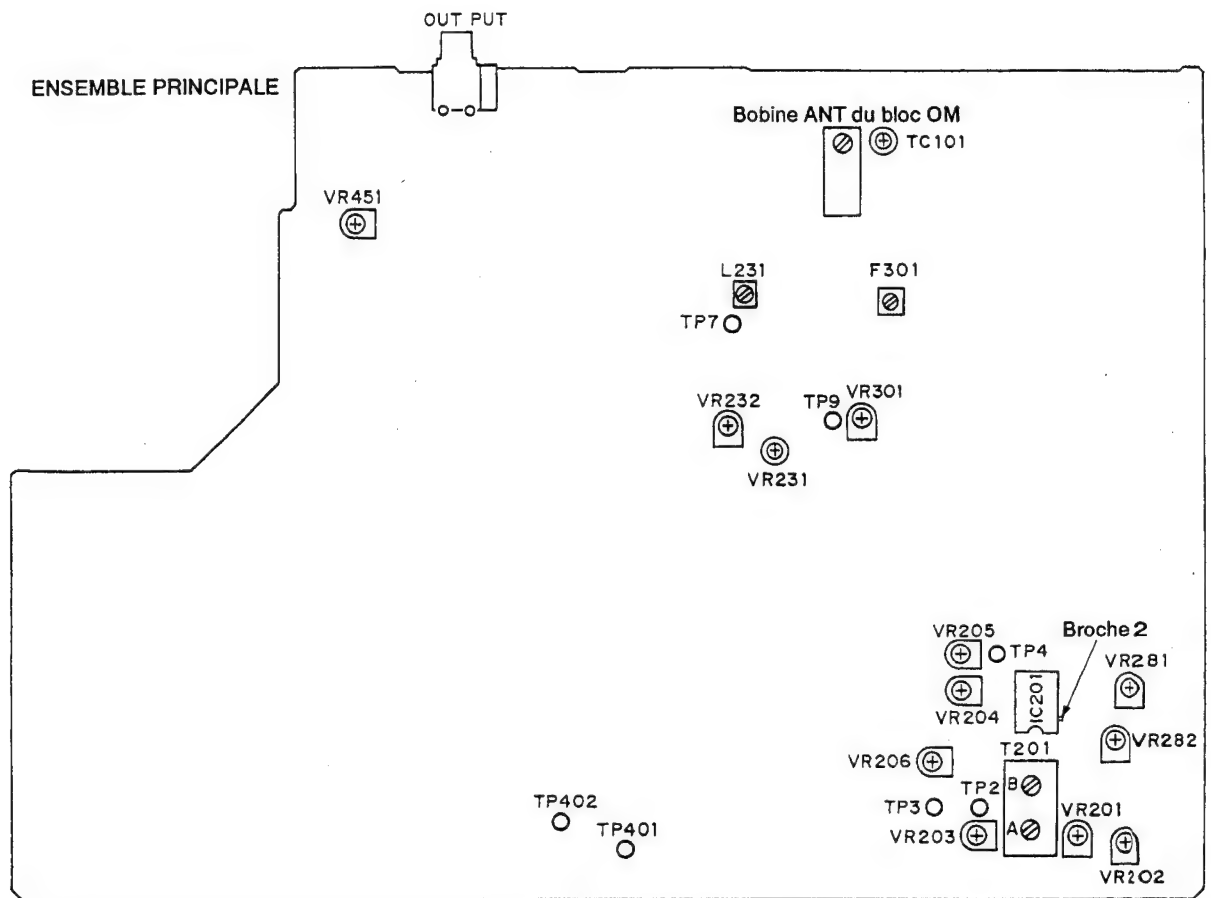


Fig. 6-3 Point de réglage

6. AJUSTES

6.1 AJUSTES DEL SINTONIZADOR DE FM

- Conecte como indica la Fig. 6-1.

6.1.1 FM MONO

Paso	Ajuste	FM SG (1 kHz \pm 75 kHz dev.)			Visualización fluorescente, banda de FI, etc.	Posición	Ajuste
		Frecuencia	Modulación	Nivel			
1	Ajuste del medidor T	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-B	Ajuste de modo que la tensión entre TP2 y TP3 sea 0 ± 100 mV.
2	Ajuste de la distorsión monofónica	98 MHz	MONO	60 dB μ	98 MHz NORMAL	T201-A VR203	Ajuste de modo que la distorsión sea mínima.
3	Ajuste del subbalance	98 MHz	MONO	60 dB μ	98 MHz NORMAL	VR206	Ajuste de modo que la tensión de CA en IC201 patilla 2 sea mínima.

6.1.2 FM STEREO

Paso	Ajuste	FM SG (1 kHz \pm 75 kHz dev.)			Visualización fluorescente, banda de FI, etc.	Posición	Ajuste
		Frecuencia	Modulación	Nivel			
1	Ajuste del VCO	108 MHz	OFF	60 dB μ	108 MHz	VR231	Ajuste de modo que la salida en TP7 sea $38 \text{ kHz} \pm 100 \text{ Hz}$
2	Cancelación del piloto	107 MHz	PILOT ONLY	60 dB μ	107 MHz NORMAL	VR232	Ajuste de modo que la tensión de, terminales de salida, CA sea mínima (MAX LPF: OFF)
3	Ajuste de la distorsión estereofónica (NORMAL)	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL	VR281	Ajuste de modo que la distorsión sea mínima.
4	Ajuste de la distorsión estereofónica (SUPER ESTRECHA)	89 MHz	L-ONLY	60 dB μ	89 MHz SUPER NARROW	VR282	Ajuste de modo que la distorsión sea mínima.
5	Ajuste de la separación	89 MHz	R-ONLY	60 dB μ	89 MHz NORMAL	VR202	Ajuste de modo que la separación R \rightarrow L sea máxima.
6			L-ONLY	60 dB μ	89 MHz NORMAL	VR201	Ajuste de modo que la separación L \rightarrow R sea máxima.
7	Ajuste de la reducción de ruido	89 MHz	L-ONLY	60 dB μ	89 MHz NORMAL MPX NR: ON/OFF	VR451	Ajuste de modo que el nivel de salida, cuando ON, sea $+1^{+0,5}_{-0,1}$ dB cuando el MPX NR de la unidad principal esté en OFF.

Modulación de estéreo: Principal $1 \text{ kHz L+R} \pm 68,25 \text{ Hz}$, Piloto $19 \text{ kHz} \pm 6,75 \text{ kHz}$.

6.1.3 FM ETC

Paso	Ajuste	FM SG (1 kHz \pm 75 kHz dev.)			Visualización fluorescente, banda de FI, etc.	Posición	Ajuste
		Frecuencia	Modulación	Nivel			
1	Ajuste del medidor S	99 MHz	MONO	75 dB μ	99 MHz NORMAL	VR205	Ajuste de modo que la tensión entre TP4 y masa sea $4,9^{+0,05}_{-0,1}$ V.
2	Ajuste del nivel silenciador	99 MHz	MONO	12 dB μ	99 MHz NORMAL	VR204	Ajuste de modo que el silenciamiento se desconecte en el nivel de entrada mostrado a la izquierda.

6.2 AJUSTES DEL SINTONIZADOR DE AM

- Conecte como indica la Fig. 6-2.

Paso	Ajuste	FM SG (400 Hz 30% modulación)			Visualización fluorescente, banda de FI, etc.	Posición	Ajuste
		Frecuencia	Modulación	Nivel			
1	Ajuste del seguimiento * 1	603 kHz	OFF	Nivel de entrada bajo	603 kHz	Bobina de antena del bloque de MW	Ajuste de modo que la tensión entre TP9 y masa sea máxima.
		1395 kHz	OFF	Nivel de entrada bajo	1395 kHz	TC101	
2	Ajuste del IFT * 1	603 kHz	OFF	Nivel de entrada bajo	603 kHz	F301	Ajuste de modo que la tensión entre TP9 y masa sea $2,5 \pm 0,05V$
3	Ajuste del medidor S	1008 kHz	ON	74 dB $\mu V/m$	1008 kHz	VR301	

* 1: Ajuste sólo para HIX1B.

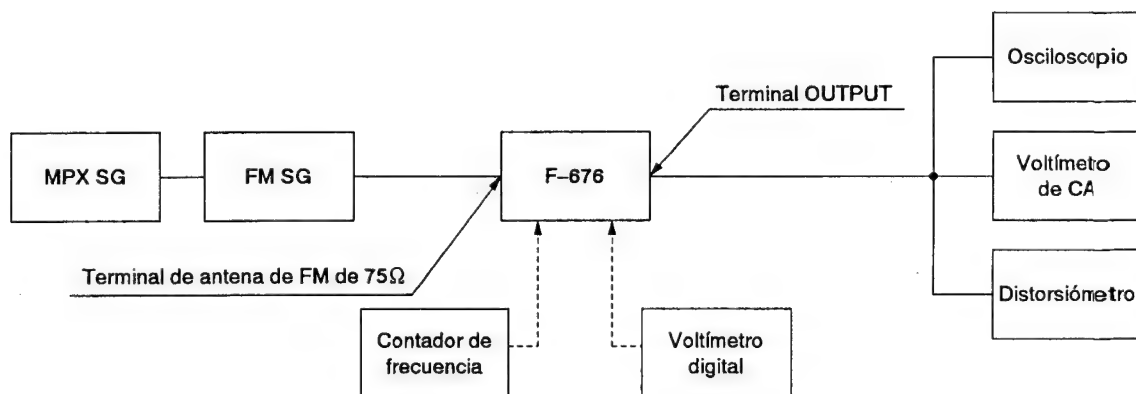


Fig. 6-1 Conexión del sintonizador de FM

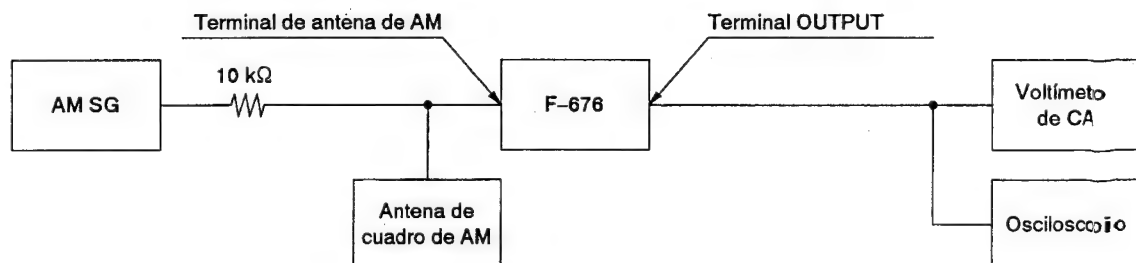


Fig. 6-2 Conexión del sintonizador de AM

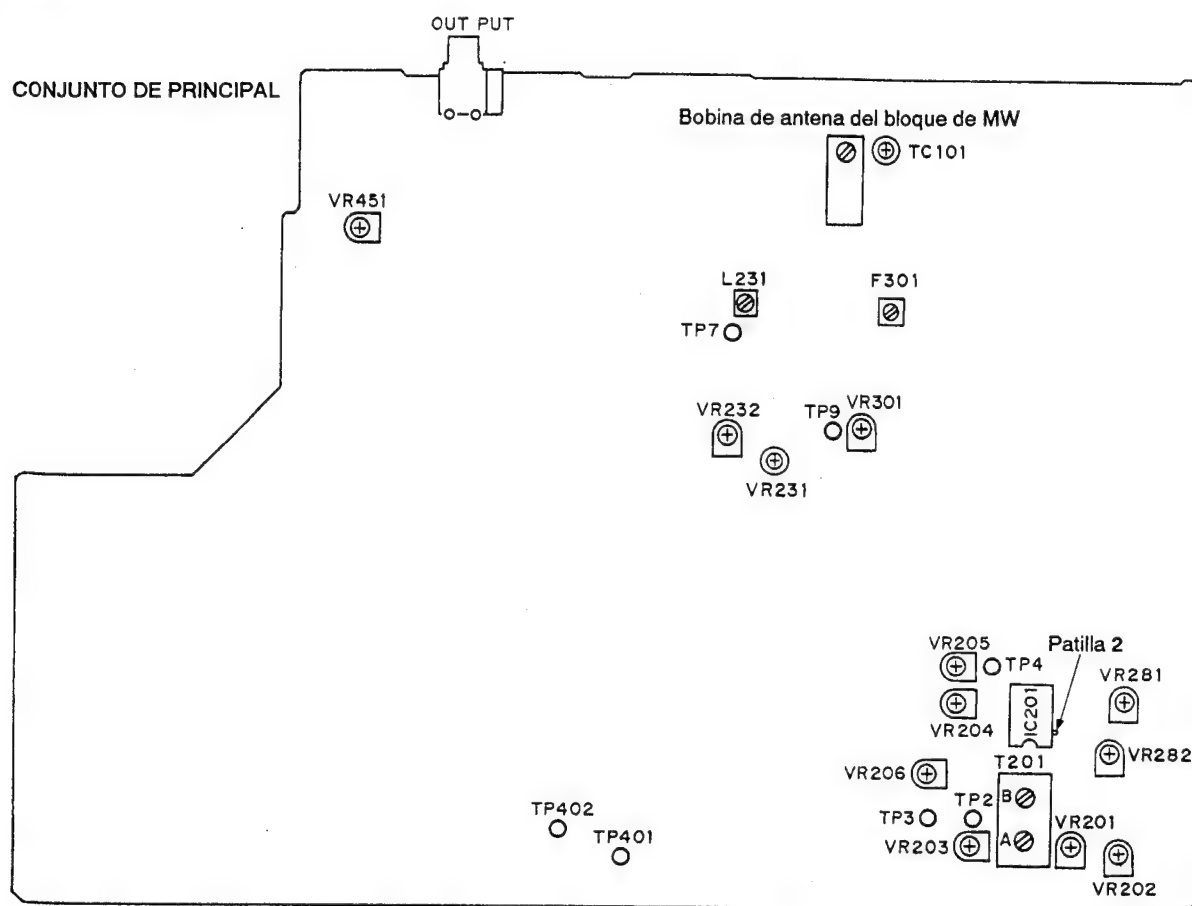


Fig. 6-3 Punto de ajuste

7. FOR F-676/HE, HB AND F-676-S/HEWZ TYPES

CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- Parts without part number cannot be supplied.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The F-676/HE, HB and F-676-S/HEWZ types are the same as the F-676/HEWZ type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		F-676/ HEWZ type	F-676/ HE type	F-676/ HB type	F-676-S/ HEWZ type	
⊙	TUNER assembly	AWZ3635	AWZ3636	AWZ3636	AWZ3635	
⊙	POWER assembly	AWZ3639	AWZ3640	AWZ3640	AWZ3639	
Δ	AC Power cord	ADG1010	ADG1021	ADG1085	ADG1010	
	Station button (1/13/25-6/18/30)	AAD1751	AAD1751	AAD1751	AAD1753	
	Station button (7/19/31-12/24/36)	AAD1752	AAD1752	AAD1752	AAD1754	
	Panel base	AMB1815	AMB1815	AMB1815	AMB1816	
	Front panel	ANB1449	ANB1449	ANB1449	ANB1450	
	Bonnet	AZN1745	AZN1745	AZN1745	AZN1803	
	Screw	ABA1047	.....	.....	.....
	Screw	.....	.....	.....	ABA-274	
	Packing case	AHD2053	AHD2053	AHD2053	AHD2054	
	Operating instructions (German)	ARC1263	.....	.....	ARC1263	
	Operating instructions (English/French/Italian/Spanish/ Portuguese/Dutch/Swedish/German)	.....	ARE1190	.....	.....
	Operating instructions (English)	.....	.....	ARB1313	.....

F-676/HE, HB, F-676-S/HEWZ

⊙ TUNER ASSEMBLY (AWZ3636)

The TUNER assembly (AWZ3636) is the same as the TUNER assembly (AWZ3635) with the exception of the following sections.

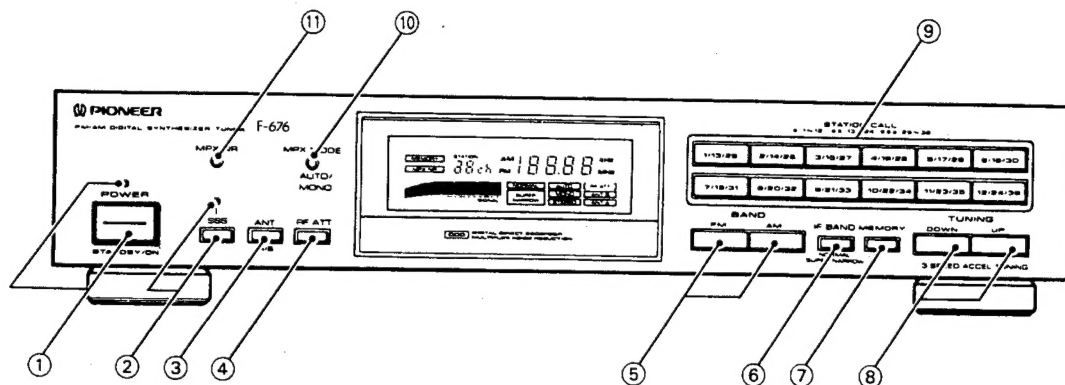
Mark	Symbol & Description	Part No.		Remarks
		AWZ3635	AWZ3636	
	D108	1SV156	.....
	D151-D158	1SS85	1SS252	
	L101	LAU2R2M	.....
	L102-L104	LAU470K	.....
	L232	LAU010M	.....
	L233, L234	LAU100K	.....
	C102	CKPUYY103M16	.....
	C110, C112	CKDYX103M25	.....
	C116	.....	CKDYX103M25	
	C206, C217	CEEA101M16	CEAS101M16	
	C245	CEEA102M16	CEAS102M10	
	C248	CEEA221M16	CEAS221M16	
	C249, C250	CEEA4R7M25	CEAS4R7M50	
	C101, C253	CKDYX103M25	.....
	C451	CEEA221M16	CEAS221M16	
	C453, C454	CEEANP010M50	CEANP010M50	
	C456, C457	CEEANP4R7M25	CEANP4R7M35	
	C474	CEEA102M16	CEAS102M10	
	R101	RD1/8PM153J	.....
	R102	RD1/2PM681J	RD1/4PM472J	
	R103	RD1/8PM330J	.....
	R114	.....	RD1/8PM103J	
	R202, R203	RDR1/4PM103J	RD1/8PM103J	
	R204, R205	RDR1/4PM332J	RD1/8PM332J	
	R237, R238	RDR1/4PM223J	RD1/8PM223J	
	R241, R242	RDR1/4PM333J	RD1/8PM333J	
	R245, R246	RDR1/4PM333J	RD1/4PM333J	
	R247, R248	RDR1/4PM123J	RD1/4PM102J	
	R249, R250	RDR1/4PM821J	RD1/4PM821J	
	R251, R252	RDR1/4PM222J	RD1/4PM152J	
	R281, R282	RDR1/4PM331J	RD1/8PM331J	
	R457, R458	RDR1/4PM821J	RD1/8PM821J	
	R459, R460	RDR1/4PM132J	RD1/8PM132J	
	R461, R462	RDR1/4PM361J	RD1/8PM361J	
	Front End Module assembly	AXQ1004	AXQ1003	

⊙ POWER ASSEMBLY (AWZ3640)

The POWER assembly (AWZ3640) is the same as the POWER assembly (AWZ3639) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ3639	AWZ3640	
⚠	C353	ACG1002	.....
⚠	L351	ATF-163	.....

9. PANEL FACILITIES



① POWER (STANDBY/ON) switch/indicator

When the power is on, indicator lights.

ON When set to ON position, power is supplied and the unit becomes operational

STANDBY .. When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

NOTE:

- The memory will be backed up so long as the power cord is not unplugged.
- If the power cord is unplugged, the memory will be retained for several days.

② SSS button/indicator

When SSS is on, indicator lights. If turned on during reception of AM or when MPX MODE is set to MONO during FM, this will produce a simulated stereo effect which provides rich ambience. SSS: Spectrum Simulated Stereo.

NOTE:

- This button's status is preset for each station in station memory.
- When the multiplex mode is AUTO, it switches to MONO and operates.

③ ANT A/B button

Selects between two antennas connected to the FM antenna A and B terminals. **ANT A** or **ANT B** indicator lights up.

NOTE:

This button's status is preset for each station in station memory.

④ RF ATT button

Set this button to ON when receiving strong FM signals (nearby stations) to reduce sound distortion ([RF ATT] indicator lights). Normally, this button should be set to OFF.

NOTE:

This button's status is preset for each station in station memory.

⑤ BAND selector buttons

FM:

Press to receive FM broadcasts.

AM:

Press to receive AM broadcasts.

⑥ IF BAND button

Each time this button is pressed the bandwidth of the IF circuit switches between "normal" and "super narrow" for the FM band.

The selected bandwidth is displayed as follows:

The **NORMAL** or **SUPER NARROW** indicator lights up.

Set to SUPER NARROW in case of interference from other stations.

NOTE:

This button's status is preset for each station in station memory.

⑦ MEMORY button

Press to memorize preset stations. The **MEMORY** indicator will remain lit for several seconds. Press the desired STATION CALL buttons to memorize it during this period.

See page 18 for operational details.

⑧ TUNING UP/DOWN buttons

Use these buttons to tune in broadcasting stations. Press UP to receive a station whose frequency is higher than the displayed frequency, and DOWN to tune into a lower frequency station.

⑨ STATION CALL buttons

Use these buttons to preset stations and to receive already preset stations.

⑩ MPX (multiplex) MODE button

Mode changes as follows each time this button is pressed:



This button does not affect AM reception.

AUTO:

Depending on the broadcast station, STEREO or MONO is automatically selected.

AUTO indicator lights up.

NOTE:

When the signal level is too weak for reception, sound output is automatically muted.

MONO:

To receive stereo broadcasts in monaural.

MONO indicator lights up.

NOTE:

This button's status is preset for each station in station memory.

⑪ MPX NR button

When **MPX NR** is on, indicator lights up.

During reception of stereo broadcasts where the signal is weak, set this to ON if noise is a problem. Noise will be suppressed and sound quality will become clearer.

NOTE:

- This button's status is preset for each station in station memory.
- This does not operate during AM signal reception.
- If the multiplex mode is MONO, it switches to AUTO and operates.